

32 UK Electoral System



Case description

The United Kingdom is a parliamentary democracy and hence is reliant on an effective electoral system (Wright, 1992). General elections are held after Parliament has been dissolved either by Royal proclamation or because the maximum term of office of five years for a government has been reached. The decision as to when a general election is to be held is taken by the Prime Minister.

For parliamentary elections the United Kingdom is divided into 659 constituencies – 18 in Northern Ireland, 40 in Wales, 72 in Scotland and 529 in England. For so-called general elections to Parliament the United Kingdom currently employs a first-past-the-post system, sometimes described as a single member plurality system. In this system each voter uses a single poll card to cast a single ballot for one constituency candidate and each constituency elects a single MP on the basis of the majority of the votes cast. Each candidate in the general election generally

represents a single political party and the party with the most seats in Parliament (not necessarily the most votes) will usually become the next government of the nation.

Figure 1 comprises a system diagram of this electoral system. The key inputs into the electoral system are ballot poll cards and ballot papers provided by the key agents, voters. The key outputs are a set of election results provided for each constituency. The key control process is one of electoral monitoring which establishes guidance on expected electoral practice and monitors the actual election to determine any deviation from such practice. The environment of the electoral system is the overall political system of the United Kingdom.

One can argue that a number of emergent properties result from the United Kingdom employing this form of electoral system. Some of such properties may be viewed as advantages to the democratic system of the United Kingdom; some might be conceived of as disadvantages.

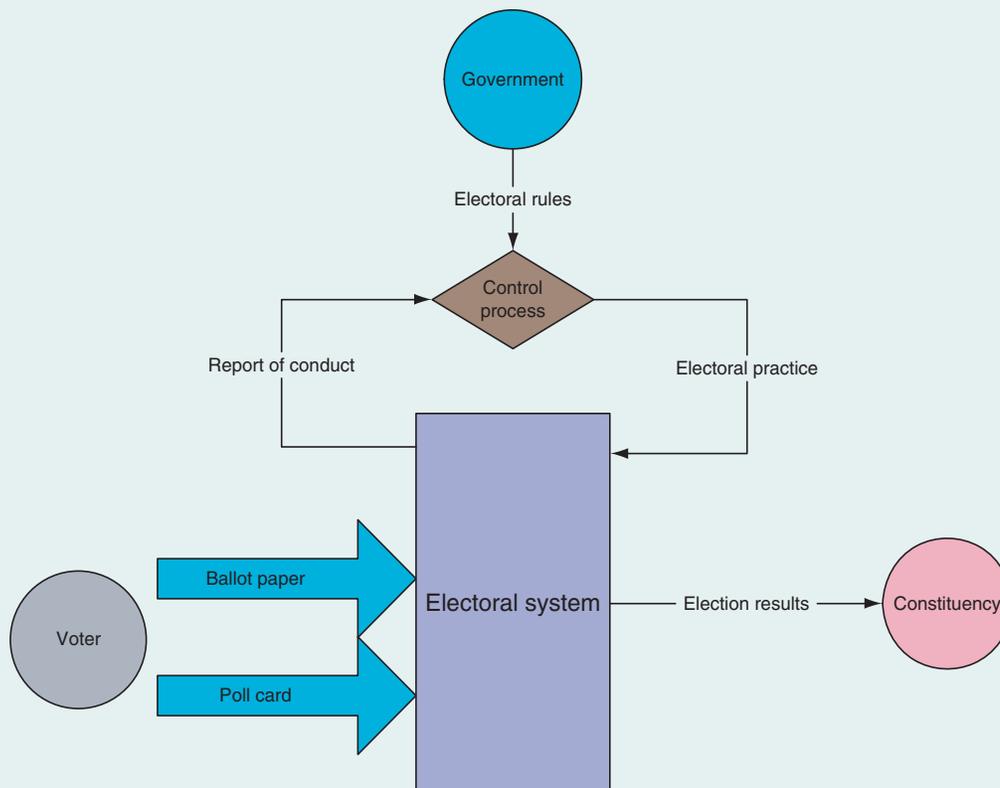


Figure 1: *The Electoral System*

The electoral system is relatively simple to implement, use and understand. The system generally provides a clear choice between two main political parties and tends to promote strong single-party governments with a coherent government opposition. A consequence of the system is that political parties tend to be broad churches of political opinion in order to satisfy the demands of various shades of the electorate. This means that the system tends to exclude not only extremist parties but also minorities from fair representation. It also means that party government can maintain in control in the face of a substantial drop in popular support. The electoral system is also susceptible to manipulation of electoral boundaries (constituency).

Again we use a non-standard case to illustrate the applicability of systems thinking of modelling an information system necessary to support a key democratic process.

The British electoral system can be modelled as a highly information-intensive activity system. Interestingly the system has remained relatively unchanged since the ballot act of 1872 and hence relies on very little modern ICT. Figure 2 represents this activity system as a diagram. The key activities in the current system are described below:

- ▶ *Registration of candidates.* Candidates in a UK general election must be over 21 and must register for election for a given constituency.
- ▶ *Registration of voters.* Registration used to be done only at set times during the year. Nowadays a person can register to vote at any time prior to the conduct of an election. To vote in a UK general election a person must be a citizen of the United Kingdom, be over the age of 18 and not excluded on grounds such as being in prison, detained in a psychiatric hospital or a member of House of Lords. Normally voters would be expected to attend in person at a specified polling booth to vote. If they are able to supply a valid reason a person may be entitled to appoint a proxy (some other person) to attend for them. Postal voting was introduced for the first time in the UK general election of 2001. In this election some 1.4 million people out of a total electorate of 44 million voted in this manner.
- ▶ *Production of electoral list and correspondence.* Each local authority in the United Kingdom is tasked with maintaining an electoral register. From this register each authority needs to produce an electoral list for each of the designated polling stations in its area. Electors

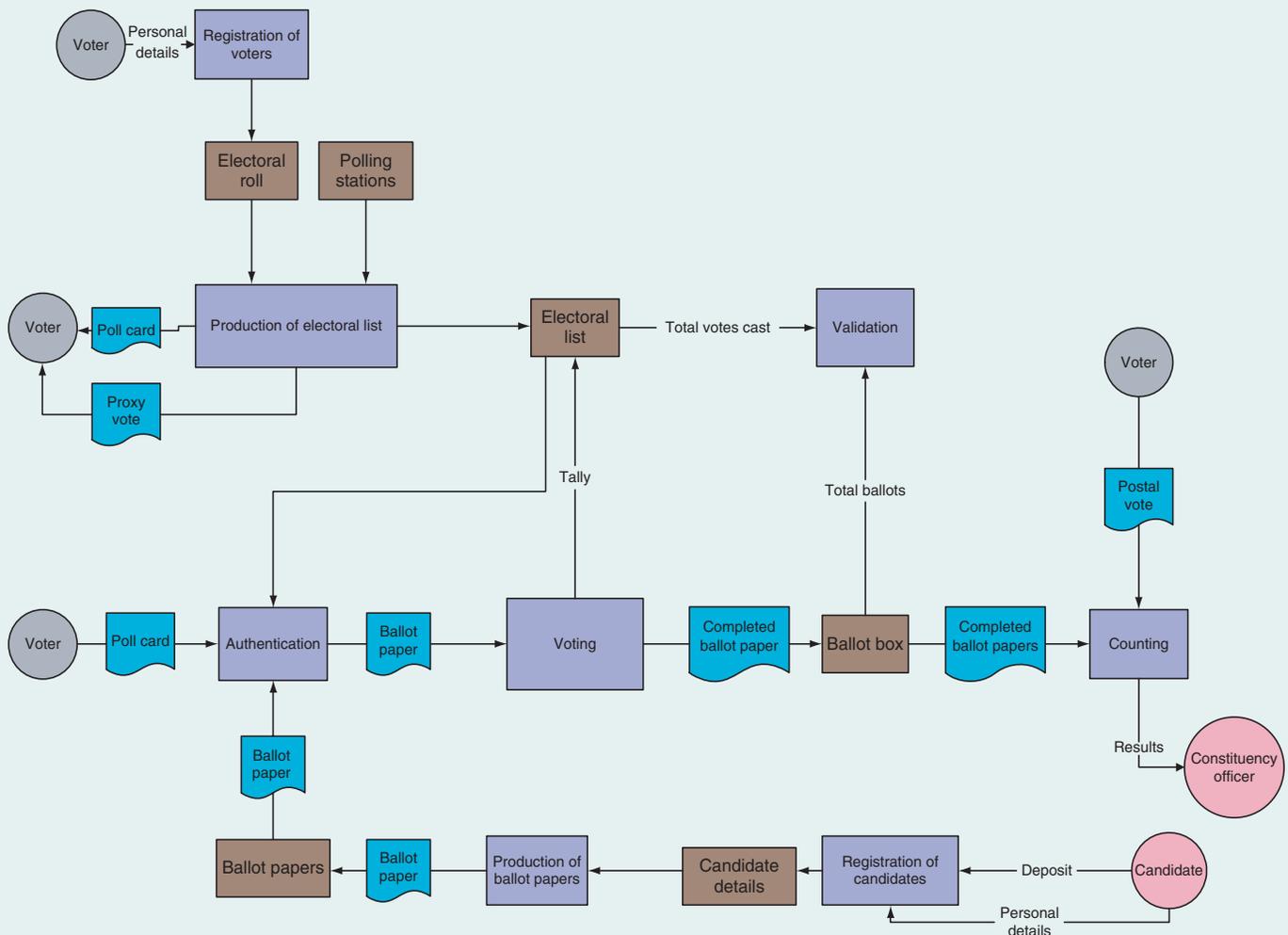


Figure 2: The Electoral System as an Information System

CASE-STUDY

receive various items of documentation through the post, the main item being a polling card detailing the name and address of the voter plus the date of the election and address of the designated polling station. Interestingly the poll card also contains a serial number, which can be used to track voters against electoral lists.

- ▶ **Authentication.** Voters typically turn up at their indicated polling station. They produce their poll card for inspection and this is checked against the electoral list. If the elector is correctly authenticated in this manner she is handed a ballot paper on which the list of candidates for the constituency is listed. To indicate that it has been issued appropriately a member of polling staff stamps each ballot paper.
- ▶ **Voting.** The elector enters a polling booth and chooses one entry against the list of candidates by placing an 'X' in an appropriate box. The ballot paper is then folded and posted in a sealed ballot box.
- ▶ **Transfer of ballot boxes.** Most elections in the United Kingdom are held during a weekday (typically a Thursday) and voters are only allowed to vote during the set period of 0700 to 2200 hours on that day. At the end of voting period all ballot boxes are collected and taken to a central counting centre.
- ▶ **Validation.** The total number of persons crossed off against the electoral list is usually cross-checked against the total number of ballots cast for each ballot box/polling station.
- ▶ **Counting.** A team of workers then count the ballots by hand into piles of 50 by candidate. Recounts are normally only ordered if candidate totals are close. The bundles are not normally counted unless candidates request that bundles be checked.
- ▶ **Publishing.** Results are announced at each counting centre and communicated to national electoral headquarters.

Commentary

The activity of electing governments can be modelled as a system and more precisely as both an activity system and an information system. All activity systems demonstrate equifinality. In this case this means that there is more than one way of organising an electoral system. Any particular 'design' for a system of elections has emergent effects, some intended; some unintended.

Like many other information systems the UK electoral system is ripe for the application of ICT. Significant cost savings and other benefits might arise from automation of key aspects of the process. However, the concept of electronic democracy has been slow to take off because of concerns over data security, particularly data privacy and the potential of fraud.

Issues

- ▶ Authentication of electors in the current human activity system of voting consists of the production of a valid polling card by the elector. This is used to check-off elector details such as name and address against an electoral list by a polling officer. Security of voting transactions is assured through the following manual procedures. A line is drawn through the elector details on the electoral list to indicate that a ballot paper has been issued to the elector. The ballot paper is stamped to indicate that a polling officer has issued it and voting is undertaken in a booth under the supervision of the polling officer. Security of voting date is assured through votes being posted in a sealed ballot box that is transferred to a counting centre at the close of voting. The ballot boxes are opened under the supervision of a presiding officer for the constituency.
- ▶ In a situation in which remote electronic voting is introduced various other forms of authentication and security must be employed. This might include posting a Personal Identification Number (PIN) to each elector on the electoral roll. In the case of using a government Website to vote this may be accompanied by an appropriate password. In the case of using some electronic voting machine or kiosk to vote the elector might be sent a smart card for use in an authentication device attached to the voting machine. This might be taken to its logical extreme in employing some biometric device to perform authentication.
- ▶ The security of transactions may be assured in various ways such as in the case of voting over the Internet using encryption and issuing some form of digital certificate to each elector that registers to vote in this way. If voting were conducted using private networks such as the ATM or National Lottery network security would be assured through use of a dedicated communications network or possible by employing tunnelling technology.
- ▶ The security of data is likely to involve various computer-based and non-computer-based measures employed against the voting server. Computer-based measures are likely to employ authorisation control lists and use of firewalls.

Keywords

System	Activity System	Information
	Information System	
Political environment	eDemocracy	
Data Security	Personal Identity Management	Authentication

References/Sources

Wright, J. V. (1992). *The UK Political System*. London, Pulse Publications.