

## Electronic voting

### Introduction

- 2.1 Electronic voting enables Members to vote in ways that eliminate some of the physical aspects of counting and recording the names and numbers of the vote on a formal decision of the House. It is considered to be more efficient than traditional methods of voting, saving time and making results more immediately available.
- 2.2 According to the 2012 *World e-Parliament Report* issued by the United Nations and the Inter-Parliamentary Union, 57% of parliaments now use an electronic voting system.<sup>1</sup> These systems are usually combined with other traditional forms of voting including a show of hands, voting cards, physical divisions, roll call or secret ballot.
- 2.3 This chapter first considers the current process for conducting a division in the House of Representatives and the time taken by divisions. It then examines and assesses electronic voting systems.

### Conduct of divisions

- 2.4 In the House, formal questions are determined either 'on the voices', by division or (rarely) by ballot. When debate has concluded, the Chair puts the question and calls on those in favour to say 'Aye' and those against to say 'No'. The Chair then states what they consider is the expressed opinion on the question. If the Chair's call, for example 'the Ayes have it',

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1 Global Centre for Information and Communication Technology in Parliament, *World e-Parliament Report 2012*, p. 80.

is challenged by two or more Members, a division is called (standing order 126).<sup>2</sup>

## Method of voting

- 2.5 When the Chair calls for a division the Clerk causes the (electronic) division bells to ring for four minutes and during this time the Chamber doors are held open. (If the Federation Chamber is meeting then the Chair in that chamber is informed that a division has been called in the House by an indicator light and proceedings are suspended to allow Members to attend the division.<sup>3</sup>)
- 2.6 After four minutes the Chair orders that the Chamber doors be locked, restates the question that is to be decided and asks Members to divide: 'Ayes' to the right of the Chair and 'Noes' to the left of the Chair.<sup>4</sup> The Chair appoints two tellers (usually Whips) for the 'Ayes' and two for the 'Noes'.<sup>5</sup> Standing order 130 provides for the tellers to:
- record the name of each Member voting;
  - count the total number of Members voting;
  - sign their records; and
  - present their records to the Speaker.<sup>6</sup>
- 2.7 In practice, the tellers tick against the names of Members present from printed division lists. The Clerk and Deputy Clerk also count the Members on either side of the Chair and, when the figures from the tellers and the Clerks agree, the tellers sign the lists and hand them to the Clerk.<sup>7</sup> The Clerk then passes the completed division lists to the Chair who announces the result.
- 2.8 In the case of a successive division, a subsequent division without intervening debate, the process is repeated except that the tellers are appointed immediately and the bells rung for one minute.<sup>8</sup> Members who wish to vote in the same way must remain seated until the result of the division is announced. Tellers record each Member's vote and a Member

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2 If only one Member challenges the Speaker's call, standing order 126 provides for that Member to have his or her name recorded as dissenting from the decision.

3 Standing order 190(a).

4 Standing order 129(c).

5 The number of tellers appointed is at the discretion of the Chair (see *House of Representatives Practice*, 6<sup>th</sup> edn, p. 277). Following a recommendation from the Procedure Committee, a trial was conducted using additional tellers in 2003. Although the trial successfully reduced the time taken for divisions, it increased inaccuracies and the exercise was abandoned. (Standing Committee on Procedure, *Trial of additional tellers*, 2003.)

6 Standing order 130(a).

7 *House of Representatives Practice*, 6<sup>th</sup> edn, p. 279.

8 Standing order 131(a).

must report to the tellers if he or she wishes to vote differently from the previous division, or voted previously but does not wish to vote in the current division, or did not vote previously but wishes to vote in the current division.<sup>9</sup>

- 2.9 The results of divisions are subsequently recorded in the Votes and Proceedings and Hansard.

## Time taken for divisions

- 2.10 In 2012 the House sat for a total of 646 hours and 8 minutes over 63 days. There were 186 divisions occupying approximately 25 hours and 19 minutes and taking up 3.92% of the House's time. Excluding the time for ringing the bells, the time for counting the divisions was approximately 15 hours and 16 minutes, taking up 2.36% of the House's time.<sup>10</sup>
- 2.11 A decade earlier the figures were similar. In 2002 the House sat for a total of 611 hours and 20 minutes over 69 days. There were 160 divisions, taking 22 hours and 13 minutes, or approximately 3.6% of the House's time.<sup>11</sup> If the ringing of the bells is excluded the time taken for counting is 14 hours and 30 minutes, or 2.4% of the House's time.
- 2.12 Another consideration is the time lost in the Federation Chamber which suspends when divisions are called in the House. In recent years a great deal of the work of the House has been undertaken in that Chamber, meeting concurrently. Between 2002 and 2012, meeting hours in the Federation Chamber more than doubled, from 149 hours 14 minutes to 283 hours. Correspondingly, the time lost in the Federation Chamber due to the need for Members to leave and attend divisions rose from 6 hours 4 minutes to 15 hours and 5 minutes.<sup>12</sup>

## Electronic voting systems

- 2.13 The common features of electronic voting systems in parliaments include:
- a voting panel with buttons for the Member to record their vote;
  - secure access to the voting panel; and
  - display panels in the chamber showing results.

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9 Standing order 131(b).

10 Chamber Research Office statistics, April 2013.

11 Standing Committee on Procedure, *Review of the conduct of divisions*, August 2003, pp. 7 and 19-20.

12 Chamber Research Office statistics, April 2013.

- 2.14 Voting panels provide buttons allowing Members to record an affirmative or negative vote. A third button is usually available to indicate either 'present' or 'abstain'. The voting panels may be at each Member's desk or at voting stations at several points in the chamber. For example, as Members of the United States House of Representatives are not provided with individual desks, 46 voting stations are at points around the chamber.<sup>13</sup>
- 2.15 Voting panels at Members' desks may also incorporate a microphone system and display other information such as the day's agenda.<sup>14</sup> The voting panels in the newly refurbished Kenyan parliamentary chamber, which opened in August 2011, include an electronic buzzer to alert the Speaker when a Member wishes to speak.
- 2.16 Systems provide for Members to change their vote, usually by pressing a different button while the vote is still open. In the Scottish Parliament, an incorrect vote may be changed within 50 seconds by pressing the correct button.<sup>15</sup> Similarly, in the United States House of Representatives, a Member may change their vote during the first 10 minutes of a 15-minute vote by pressing the correct button. However, after the first 10 minutes of a 15-minute vote, the Member must use a ballot card by handing it to the tally clerk who will manually enter the card into the electronic voting system.<sup>16</sup>
- 2.17 Secure access to the voting panel may be provided: via a personal identification number (PIN), a card, or biometric means. Some legislatures use a combination, enhancing security. For example, the Mexican Chamber of Deputies uses a PIN plus a fingerprint scanner at each Member's seat.<sup>17</sup> The choice of security technologies is increasing:
- The range of security related technology which could be a feature of future electronic voting systems includes "smart cards", touch screens and infra red handsets. Iris recognition technology also has possible application to ensure the security of future electronic voting systems.<sup>18</sup>

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13 Jacob R. Straus, *Electronic Voting System in the House of Representatives: History and Usage*, Congressional Research Service, June 13, 2011, p. 10 [fn 54].

14 House of Representatives, *Electronic Voting: Report of inspection of equipment used in the parliaments of Belgium, Denmark, Finland, Sweden and the United States of America and in the European Parliament building in Brussels*, October/November 1993, p. 9.

15 Standing Committee on Procedure, *Learning from other parliaments: Study Program 2006*, August 2006, p. 23.

16 Straus, *Electronic Voting System in the House of Representatives: History and Usage*, p. 11.

17 J Middlebrook, 'Voting Methods in Parliament', *Constitutional and Parliamentary Information*, No. 186 2<sup>nd</sup> half-year 2003, pp. 44-45.

18 Middlebrook, 'Voting Methods in Parliament', p. 45.

- 2.18 Display panels in a chamber are placed where they can be seen by all Members and the public. Screens range from 32" television screens in the Estonian Riigikogu<sup>19</sup> to 5 metre by 15 metre screens in the Mexican Chamber of Deputies.<sup>20</sup> Display screens have been purpose built for some new chambers, for example in the Kenyan National Assembly. However, in many cases the design of the screens has had to take into consideration the design integrity of older buildings. In the United States House of Representatives the display panels are faced with a silk screened plexiglass that matches the background cloth tapestry covering the adjacent panels. The panels are invisible until illuminated from within with the Members' names and the results of the vote.<sup>21</sup>
- 2.19 Display panels show results and may also provide other information, including the question under consideration. A running total is usually displayed, and some systems show the vote of each Member. The European Parliament and the United States House of Representatives display the name of each Member and coloured lights indicate how each vote has been cast.<sup>22</sup> In some legislatures panels display the seating plan of the chamber with a light appearing next to the seat of each Member as he or she votes.<sup>23</sup>
- 2.20 Members may also have a personal display on their desk and monitoring screens may be located at the desk of the Presiding Officer or the clerks. These screens may not display all of the information on the larger screens in the chamber.<sup>24</sup>

## Overall assessment of electronic voting systems

- 2.21 Overall, it seems that electronic voting systems are reliable and accurate. The technology itself has proven dependable and is continually being improved. As early as 1982 it was noted that breakdowns 'are so rare as to be discountable, and mechanical error is virtually unknown'.<sup>25</sup> Judith Middlebrook commented in 2003 that for 'legislatures which regularly use electronic voting systems technical reliability is not a major concern'.<sup>26</sup>

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19 Middlebrook, 'Voting Methods in Parliament', p. 44.

20 Middlebrook, 'Voting Methods in Parliament', p. 50.

21 Committee of House Administration, *The Electronic Voting System for the United States House of Representatives*, US Government Printing Office, Washington, April 15 1979, p. 2.

22 KA Bradshaw, 'Methods of Voting', *Constitutional and Parliamentary Information*, 3<sup>rd</sup> series, no. 132, 4<sup>th</sup> Quarter 1982, p. 223.

23 Bradshaw, 'Methods of Voting', p. 223.

24 Middlebrook, 'Voting Methods in Parliament', p. 50.

25 Bradshaw, 'Methods of Voting', p. 220.

26 Middlebrook, 'Voting Methods in Parliament', p. 43.

2.22 In 2006, a previous Procedure Committee was told that suitable systems could be purchased 'off the shelf' and tailored to a parliament's individual requirements.<sup>27</sup> Rapid advances in technology suggest that systems have further improved and that increased choice is available.<sup>28</sup>

2.23 The time savings and efficiency gains provided by electronic voting systems are well attested. The time saved during voting varies, depending on the size of the legislature, and is most obvious in larger assemblies. For example, the Russian State Duma with a membership of 450:

It takes 15 minutes to vote without using the system ... and an average of 20 seconds using the electronic voting system. There were 4774 votes during 71 sessions in 2002. With some degree of understatement the response from the Duma noted that without the electronic voting system, determining the will of Members would be unwarrantedly delayed.<sup>29</sup>

2.24 The average membership of legislatures that use electronic voting is 250.<sup>30</sup> However, many smaller legislatures have electronic voting, for example, the Scottish Parliament with 129 members, the Israeli Knesset with 120, the Singapore Parliament with 99, and the Irish Senate with 60.

2.25 Apart from saving time for Members in the chamber, accurate results of a vote are available immediately for wider distribution. Speaker Martin estimated that the time savings for parliamentary officers 'would exceed, or in fact virtually double, that saved in the House in the recording and counting of votes'.<sup>31</sup> The Clerk referred recently to the faster availability of final details and results:

While the results are known immediately in the chamber, the outside checking work allows for any discrepancies in the teller sheets to be corrected before final publication more widely. The checking process undertaken by the Table Office may delay publication of the full lists for varying amounts of time, as does the manual entry of results into the division database.<sup>32</sup>

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27 Standing Committee on Procedure, *Learning from other parliaments: Study Program 2006*, p. 23.

28 Mr Bernard Wright, Clerk of the House of Representatives, *Submission 1*, p. 4; Ms Carol Mills, Secretary, Department of Parliament Services (DPS), *Submission 2*, p. 2.

29 Middlebrook, 'Voting Methods in Parliament', p. 45.

30 Middlebrook, 'Voting Methods in Parliament', p. 51.

31 House of Representatives, *Electronic Voting*, p. 21.

32 Mr Wright, Clerk of the House of Representatives, *Submission 1*, pp. 1-2.

## Committee comment

- 2.26 The Committee acknowledges that the time saved by electronic voting in the House of Representatives might be modest, but could well represent an efficiency gain. As the figures in paragraph 2.10 demonstrate, divisions in the House currently take up several sitting days per year. If the time lost in the Federation Chamber is taken into account, the figure increases considerably. With the growth in the business of the House and corresponding time pressures, the time that might be saved by an electronic voting system could be significant.
- 2.27 While the figures indicate the actual time lost they do not take into consideration the disruption to Members, the House or committees. The Chamber can take time to settle back to business after a division and Members may not be able to return to previous work, either in the Federation Chamber or a committee, due to other commitments. This hidden loss of time must also be taken into account when considering efficiency improvements.
- 2.28 The Committee recognises there is a general view that technology is now considered accurate and reliable and continues to improve. Many of the concerns expressed by previous Committees – such as security – may well have been addressed and it may be feasible to develop a tailored system for the House’s requirements. But it is not in a position to draw any conclusions because of the limited evidence, particularly technological evidence, that is available to it now.
- 2.29 In the following chapter the Committee canvasses some issues particular to electronic voting in the House of Representatives.

