The Parliament of the Commonwealth of Australia

### Electronic Voting in the House of Representatives

House of Representatives Standing Committee on Procedure

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#### Foreword

On 29 November 2012 the Committee resolved to inquire into electronic voting in the House of Representatives. Although the Committee has conducted two previous inquiries into the conduct of divisions generally, it has never examined electronic voting in detail.

Technological advances and generational change, together with the close numbers in the 43<sup>rd</sup> Parliament, provide compelling reasons to examine the issue more thoroughly. Unfortunately the inquiry has been truncated by the press of other Committee business.

Nevertheless, my Committee colleagues and I decided to prepare this short report to review existing evidence. We hope the paper will provide a basis for an indepth inquiry if a future Procedure Committee wishes to examine the matter.

Electronic voting could make a significant difference to the efficiency of the House. It may be that many of the previous concerns regarding electronic voting systems have been addressed. However, important procedural and contextual issues remain. These, along with questions concerning available technology, cost and the impact of the implementation of electronic voting in the House, deserve further consideration. It is my hope that the Procedure Committee of the 44<sup>th</sup> Parliament will be able to collect the necessary technical evidence and consult with Members and others with a stake in the operations of the House to bring a considered view to this important topic.

Geoff Lyons MP Chair

### Membership of the Committee

Chair	Mr Geoff Lyons MP
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Deputy Chair Mr Russell Broadbent MP

Members	Hon Joel Fitzgibbon MP (to 14.05.13)	Mr Steve Irons MP
	Ms Jill Hall MP	Mr Ewen Jones MP
	Mr Chris Hayes MP (from 14.05.13)	Ms Julie Owens

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### Terms of reference

To inquire into and report on the conduct of divisions, including but not limited to:

- (a) the procedures for counting and reporting the vote using an electronic voting system;
- (b) the possible use of electronic voting in the Chamber of the House of Representatives; and
- (c) the cost of establishing and providing such a service.

### List of abbreviations

- DPS Department of Parliamentary Services
- PISO Parliamentary Information Systems Office

# 1

#### Introduction

#### Background to the inquiry

- 1.1 Electronic voting in the Chamber of the House of Representatives is a matter of long-standing interest to those interested in the operations of the House. Although the Standing Committee on Procedure (the Committee) has conducted two inquiries into the conduct of divisions generally,<sup>1</sup> it has never examined electronic voting in detail.
- 1.2 The topic has become more immediate for several reasons. First, technological advances are resolving many of the reliability and security issues associated previously with electronic voting systems. Second, generational change is producing a cohort of Members of Parliament who expect to operate in a modern technological environment. Finally, the close numbers in the House in the 43<sup>rd</sup> Parliament invite a closer focus on the effectiveness of the processes for handling divisions and the possibilities for improvements. Accordingly, on 29 November 2012, the Committee resolved to inquire into electronic voting in the House of Representatives.
- 1.3 Apart from the two inquiries by the Committee into the conduct of divisions, there have been other relevant inquiries in the context of the Australian Parliament. This chapter summarises the findings of those inquiries before setting out details of the conduct and scope of this inquiry.
- 1.4 At the outset, the Committee acknowledges the truncated nature of this inquiry resulting from the election timing and a need to conclude

<sup>1</sup> In 1996 and 2003. Details of the inquiries are discussed in paragraphs 1.5 and 1.6.

another inquiry concurrently.<sup>2</sup> It also acknowledges the tentative nature of this report (which might better be regarded as a discussion paper).

#### **Previous inquiries**

#### **Procedure Committee inquiries**

- 1.5 A previous Procedure Committee inquired into divisions in 1996 to examine ways of mitigating the delays caused by the recording of divisions. That Committee declined to examine electronic voting in detail. It concluded that the cost of installing and maintaining an electronic voting system, combined with the time required to develop and install it, precluded its consideration as a viable option.<sup>3</sup> A dissenting report, while acknowledging the costs involved, maintained that an electronic voting system was the most effective way to streamline division procedures.<sup>4</sup>
- 1.6 In 2003 the Committee again reviewed the conduct of divisions and, this time, considered electronic voting in more detail. It was particularly interested in the time taken for divisions and found that, in 2002, approximately 3.6% of the House's time was taken up with divisions. If the ringing of the bells were excluded, the figure was reduced to 2.4%.<sup>5</sup> The Committee considered that, before the technological alternatives and costs of establishing and implementing an electronic voting system were to be examined, the House should 'fully consider the general principle of electronic voting'.<sup>6</sup> The Committee did not recommend that electronic voting be implemented then but that provision be made for the House to debate the topic.<sup>7</sup>
- 1.7 During a study tour in 2006 members of a previous Procedure Committee examined electronic voting systems and procedures in a number of parliaments, including the Scottish Parliament, the National Assembly of France, and the Assembly of Wales.<sup>8</sup> The Committee observed that the 'time-saving benefits of electronic voting were certainly obvious in the

<sup>2</sup> The Committee is currently completing its inquiry into the maintenance of the standing and sessional orders.

<sup>3</sup> Standing Committee on Procedure, *Conduct of Divisions*, November 1996, p. 5.

<sup>4</sup> Standing Committee on Procedure, Conduct of Divisions, p. 16.

<sup>5</sup> Standing Committee on Procedure, *Review of the conduct of divisions*, August 2003, p. 7. The House sat for 611 hours in 2002 so these percentages translated into 22 hours 13 minutes and 7 hours 55 minutes respectively.

<sup>6</sup> Standing Committee on Procedure, Review of the conduct of divisions, p. 7.

<sup>7</sup> Standing Committee on Procedure, *Review of the conduct of divisions*, p. 8-9. We are not aware of any subsequent debate on electronic voting taking place in the House.

<sup>8</sup> Standing Committee on Procedure, *Learning from other parliaments: Study Program 2006*, August 2006, p. 22.

parliaments visited'. It also learnt that many of the issues that had been of concern in the early days of electronic voting were no longer relevant, for example: Members being uncertain of the question, recording the wrong vote, or arriving in the Chamber without their voting cards, had all been addressed.<sup>9</sup>

#### Other inquiries

- 1.8 Apart from the Committee's own inquiries into electronic voting a number of other inquiries provide useful information although they relate to chambers that are different from the House of Representatives. As far back as 1982, Mr K.A. Bradshaw, the then Clerk Assistant of the House of Commons of the United Kingdom, undertook an extensive examination of voting methods, including electronic voting. Mr Bradshaw's survey included the views of 43 national parliaments.<sup>10</sup>
- 1.9 Overall Mr Bradshaw was satisfied that electronic voting systems improved the efficiency of the division process. He was particularly impressed with the reliability of the electronic voting systems available and with the time savings gained by their use.<sup>11</sup> He noted that openness of the parliamentary process was enhanced by the display of information and results of voting on display panels.<sup>12</sup>
- 1.10 However, Mr Bradshaw cautioned that the systems could be open to abuse by Members casting a vote on behalf of another Member.<sup>13</sup> He also indicated that the introduction of an electronic voting system could lead to an increase in the votes called for.<sup>14</sup>
- 1.11 In 1990 in response to a resolution of the Senate the President presented a paper on electronic voting. The paper weighed the advantages and disadvantages of electronic voting systems and provided a limited review of the systems in operation elsewhere. The paper identified two advantages of electronic voting. It would:

- 11 Bradshaw, 'Methods of Voting', p. 220.
- 12 Bradshaw, 'Methods of Voting', p. 223.
- 13 Bradshaw, 'Methods of Voting', p. 223.
- 14 Bradshaw, 'Methods of Voting', p. 224.

 <sup>9</sup> Standing Committee on Procedure, *Learning from other parliaments: Study Program 2006*, pp. 22-23.

<sup>10</sup> KA Bradshaw, 'Methods of Voting', Constitutional and Parliamentary Information, 3<sup>rd</sup> series, no. 132, 4<sup>th</sup> Quarter 1982. The study was undertaken for the Inter-Parliamentary Union. A questionnaire was circulated to members of the Association of Secretaries General of Parliaments and Mr Bradshaw based the report on the 43 responses received. It is perhaps worth noting that the United Kingdom House of Commons does not have electronic voting. Its 650 Members vote by passing through 'Aye' or 'No' lobbies on either side of the Chamber, or by using ballot papers in the case of deferred divisions.

- save some of the time spent in divisions; and
- allow the speedy production of a record of divisions which could be incorporated into the Journals and Hansard electronically.<sup>15</sup>
- 1.12 However, the paper concluded that in the case of the Senate, the time savings in both instances would not be substantial enough to warrant the expected cost of implementing electronic voting. The paper also identified some disadvantages:
  - it would remove part of a pause in the proceedings which is often convenient;
  - activities which now take place during the count may be transferred to other components of the time spent on divisions, so that little time would in fact be saved;
  - the current practice of Senators sitting to the right or left of the Chair has some advantages which would be lost; and
  - more divisions may be called.<sup>16</sup>
- 1.13 The paper was referred to the Senate Procedure Committee for consideration and, in its subsequent report, that Committee stated that the Senate 'should not make a decision on electronic voting at this stage' and advised that it would continue to monitor the issue.<sup>17</sup> The Senate has not considered the matter further.<sup>18</sup>
- 1.14 In 1993 the then Speaker, the Hon Stephen Martin MP, undertook a study tour to examine electronic voting systems in several parliaments. He was accompanied by his senior adviser, the Clerk of the House and two technical officers from the Parliamentary Information Systems Office (PISO). The report prepared by Mr Martin provides a comprehensive survey of the systems observed, including technical details. The Speaker summed up the possible advantages and disadvantages of electronic voting for the House:

#### Advantages

- a saving in the time of the House and its Members;
- the immediate availability in both electronic and hard copy form of complete details of a division, with the ability to have this information electronically incorporated in the official record of the proceedings (the Votes and Proceedings) or *Hansard* report and its storage for future use;

<sup>15</sup> The Senate, *Electronic Voting*, 1990, p. 8; 08/05/1990, J.18.

<sup>16</sup> The Senate, *Electronic Voting*, p. 11.

<sup>17</sup> Senate Procedure Committee, Second Report of 1990, December 1990, p. 1.

<sup>18</sup> *Odgers' Australian Senate Practice*, 13<sup>th</sup> ed., 2012, p. 287. However, *Odgers* indicates that the original paper has been updated for the benefit of Senators.

- the ability to show on the electronic display panel the question or other matter before the House; and
- electronic recording of voting results leads to far more statistical information being available for analysis.

#### Disadvantages

- the loss of an opportunity for a pause or 'cooling off' period in the proceedings which can often assist in the smoother transaction of later business;
- if Members vote from their own places in the Chamber instead of the traditional 'ayes to the right, noes to the left', it would not be readily apparent to the gallery or television observer how a particular Member voted;
- the possibility of one Member voting for an absent colleague or other similar abuses;
- the possibility of additional divisions being called for because of the availability of the equipment; and
- the significant cost involved particularly of installation.<sup>19</sup>
- 1.15 The report concluded that, in the interests of efficiency, it was reasonable to support a proposal to install an electronic voting system in the House. The recommendation set out a detailed plan to instigate the process and ensure that the concerns raised in the report were addressed.<sup>20</sup>
- 1.16 In 2003 the then Clerk of the House, Mr Ian Harris, as President of the Association of Secretaries General of Parliaments, circulated an informal questionnaire on electronic voting to 64 parliaments. Of the 53 parliaments that responded, 32 used an electronic voting system.<sup>21</sup> The questionnaire canvassed issues including:
  - financial aspects;
  - technological issues;
  - security issues; and
  - procedural or context issues.<sup>22</sup>
- 1.17 The responses highlighted similar advantages and disadvantages to those identified in the reports reviewed above. Concerns were expressed over the technical reliability and effectiveness of electronic voting systems and their security.<sup>23</sup> On the other hand, there was positive feedback on time

<sup>19</sup> 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. 19.* 

<sup>20</sup> House of Representatives, Electronic Voting, pp. 31-32.

<sup>21</sup> J Middlebrook, 'Voting Methods in Parliament', *Constitutional and Parliamentary Information*, No. 186 2<sup>nd</sup> half-year 2003, pp. 40-41.

<sup>22</sup> Middlebrook, 'Voting Methods in Parliament', p. 41.

<sup>23</sup> Middlebrook, 'Voting Methods in Parliament', pp. 43-45.

saved during divisions by the use of electronic voting and the immediate availability of results of divisions both to the Chamber and the public.<sup>24</sup>

#### Scope of the inquiry

- 1.18 The Committee acknowledges the work of previous Procedure Committees as well as Speakers, Clerks of the House of Representatives, and the Senate. Their reports have provided extensive case studies and background on the experience of parliaments in establishing and using electronic voting systems. They also identified the advantages and disadvantages of such systems.
- 1.19 Previous Committee reports have not examined the topic in detail nor considered the practical implications of developing, installing and maintaining an electronic voting system in the Chamber of the House. Rather they have focussed more generally on conducting divisions.
- 1.20 It is time to undertake an in-depth inquiry into the desirability and feasibility of establishing and maintaining an electronic voting system. Unfortunately time constraints have required the Committee to limit this inquiry to an examination of the information available in the public domain and a review of the evidence from previous inquiries, supplemented by written submissions to this inquiry.
- 1.21 The Committee wishes to use the information and evidence it has gathered—limited as it is—to identify the major issues involved and prepare this report that can be the foundation for a comprehensive inquiry by a future Procedure Committee.

#### Terms of reference and conduct of the inquiry

1.22 The terms of reference were published on the Committee's website and written submissions invited. The formal terms of reference provide for the Committee :

To inquire into and report on the conduct of divisions, including but not limited to:

- (a) the procedures for counting and reporting the vote using an electronic voting system;
- (b) the possible use of electronic voting in the Chamber of the House of Representatives; and
- (c) the cost of establishing and providing such a service.

#### Structure of report

- 1.23 Chapter 2 considers the current process for conducting divisions and then examines electronic voting systems.
- 1.24 Chapter 3 discusses in a necessarily general way the use of an electronic voting system in the Chamber, including procedural and contextual issues, cost and design and heritage concerns. It also suggests some of the issues a future in-depth inquiry may wish to consider.

## 2

#### **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',

<sup>1</sup> 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

<sup>2</sup> 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.

<sup>3</sup> Standing order 190(a).

<sup>4</sup> Standing order 129(c).

<sup>5</sup> 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.)

<sup>6</sup> Standing order 130(a).

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

<sup>8</sup> 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.

<sup>9</sup> Standing order 131(b).

<sup>10</sup> Chamber Research Office statistics, April 2013.

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

<sup>12</sup> 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>

- 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>

<sup>19</sup> Middlebrook, 'Voting Methods in Parliament', p. 44.

<sup>20</sup> Middlebrook, 'Voting Methods in Parliament', p. 50.

<sup>21</sup> 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.

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

<sup>23</sup> Bradshaw, 'Methods of Voting', p. 223.

<sup>24</sup> Middlebrook, 'Voting Methods in Parliament', p. 50.

<sup>25</sup> Bradshaw, 'Methods of Voting', p. 220.

<sup>26</sup> 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>

14

<sup>27</sup> Standing Committee on Procedure, Learning from other parliaments: Study Program 2006, p. 23.

<sup>28</sup> 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.

<sup>29</sup> Middlebrook, 'Voting Methods in Parliament', p. 45.

<sup>30</sup> Middlebrook, 'Voting Methods in Parliament', p. 51.

<sup>31</sup> House of Representatives, *Electronic Voting*, p. 21.

<sup>32</sup> 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.

### 3

#### **Electronic voting in the Chamber**

#### Introduction

- 3.1 'Divisions are an important facet of the parliamentary day a time when the policy divide is most evident.'<sup>1</sup> With this statement the Clerk of the House of Representatives highlighted the essence of divisions. They encapsulate the very public nature of decision-making by those who are elected to the House in our system of government. This perspective is the foundation for what the Clerk characterises as the 'paramount' issue with any voting system: the integrity of the votes.<sup>2</sup>
- 3.2 The Clerk's submission canvassed the principal issues, including procedural issues, and the potential benefits and disadvantages of electronic voting. He also noted the long history of consideration of electronic voting in the Chamber of the House and stated that the design and construction of Parliament House provided for installation of such a system in the future.<sup>3</sup>
- 3.3 The Secretary of the Department of Parliamentary Services (DPS) stated that there appears to be no difficulty implementing an electronic voting system in the House of Representatives Chamber from a technological perspective. However technological issues were not canvassed in any detail in the submission. The Secretary referred to the major limitation not being technological capability, rather, the willingness to break from tradition.<sup>4</sup>

<sup>1</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 5.

<sup>2</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 3.

<sup>3</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 1.

<sup>4</sup> Ms Carol Mills, Secretary, Department of Parliamentary Service (DPS), Submission 2, p. 3.

3.4 This chapter deals with the procedural and contextual issues that may affect the process of divisions and the traditional operation of the House and briefly identifies additional topics that will need further consideration in any future inquiry: cost and design and heritage concerns.

#### **Procedural and contextual issues**

- 3.5 Procedural and contextual considerations include:
  - the importance of visibility in the way Members vote;
  - the provision of a 'cooling off' period in the current method of voting;
  - the loss of the current opportunity for discussion with colleagues, particularly Ministers during divisions; and
  - the possibility of more divisions due to the ease of voting.

#### Members seen to be voting

- 3.6 The introduction of an electronic voting system to the House may reduce the visibility of Members' voting decisions.<sup>5</sup> Currently, Members can easily be seen as they move to either side of the Chamber to indicate their decision. Speaker Martin recognised this aspect and recommended that the current process be retained if electronic voting were introduced.<sup>6</sup> Ms Judith Middlebrook noted that this process is seen as 'having symbolic value in terms of Members publicly supporting a particular decision'.<sup>7</sup>
- 3.7 There is already in divisions a public aspect: not only are decisions by Members visible but, by their nature, the decision-making processes engage the audience the Australian public in the immediacy of the democratic process.

There is a certain theatrical aspect to the ringing of the bells and the summoning of Members to the chamber. The drama is heightened when there is the possibility of Members crossing the floor, or, when free votes are held, the way in which individual Members vote is the object of considerable scrutiny.<sup>8</sup>

<sup>5</sup> 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. 24.

<sup>6</sup> House of Representatives, *Electronic Voting*, p. 31.

<sup>7</sup> J Middlebrook, 'Voting Methods in Parliament', *Constitutional and Parliamentary Information*, No. 186 2<sup>nd</sup> half-year 2003, p. 45.

<sup>8</sup> Mr Bernard Wright, Clerk of the House of Representatives, *Submission 1*, p. 5.

- 3.8 The Secretary of DPS stated that in many ways electronic voting is seen as a natural element of more open and efficient parliaments.<sup>9</sup>
- 3.9 Reference has already been made to the Clerk's regard for 'the integrity of the votes' as 'paramount'.<sup>10</sup> Retaining visibility in the way Members vote would be some counter to concerns that an electronic voting system might enable misuse of votes or fraudulent votes. While Speaker Martin conceded that theoretically it is possible for a Member to cast a vote (electronically) for an absent colleague he considered the possibility very low.<sup>11</sup> Ms Middlebrook reported in 2003 only two cases in which a vote was cast by someone other than the Member.<sup>12</sup> Mr Bradshaw noted that in the United States House of Representatives, where members use voting stations rather than voting from their own seats (thus providing an opportunity for fraud), there had never been an instance of it occurring.<sup>13</sup>
- 3.10 Speaker Martin considered peer pressure was sufficient to discourage abuse of the system.<sup>14</sup> Bradshaw made two suggestions to prevent fraud: Members should not be able to share their voting cards with others and the time allocated for voting should only be sufficient for each Member to cast their own vote.<sup>15</sup>
- 3.11 From time to time, opinions are expressed about the potential efficiencies of Members and Senators being able to vote from their offices *outside* the Chamber, that is, remotely. The President of the Senate identified the difficulties:
  - it could well give rise to de facto proxy voting, by Senators leaving their cards with other persons;
  - misunderstandings as to the question to be determined, more accidental results and more disputed results would probably occur;
  - party whips would be unable to check on those voting and to arrange and adjust pairs quickly as they do now in the chamber; and
  - voting would no longer be a public act requiring the personal appearance of every Senator voting, and this could lead to an

<sup>9</sup> Ms Carol Mills, Secretary, DPS, Submission 2, p. 2.

<sup>10</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 3.

<sup>11</sup> House of Representatives, *Electronic Voting*, p. 25

<sup>12</sup> Middlebrook, 'Voting Methods in Parliament', p. 44.

<sup>13</sup> KA Bradshaw, 'Methods of Voting', Constitutional and Parliamentary Information, 3<sup>rd</sup> series, no. 132, 4<sup>th</sup> Quarter 1982, p. 223.

<sup>14</sup> House of Representatives, *Electronic Voting*, p. 16.

<sup>15</sup> Bradshaw, 'Methods of Voting', p. 223.

adverse public perception and probably would be politically unacceptable.<sup>16</sup>

3.12 Speaker Martin had found in 1993 that none of the parliaments visited 'would countenance any suggestion that Members should be able to cast their votes from locations outside the Chamber'.<sup>17</sup> In 2006 the Committee found a similar sentiment prevailed in the parliaments it visited. None had considered 'any form of remote electronic voting'.<sup>18</sup>

#### 'Cooling-off' period

3.13 Another recurring concern about the impact of electronic voting is the loss of a pause or 'cooling-off' period in proceedings that is provided currently by 'physical' divisions and the time they take. The opportunity for 'cooling off' was noted by the Clerk<sup>19</sup> and by Speaker Martin who considered (in 1993) that the time taken for the division:

> ... proved a useful circuit-breaker allowing strongly aroused emotions to be calmed and leading to improved proceedings in the House after the division.<sup>20</sup>

3.14 Many reports refer to this although, in his submission to the Committee's 1996 inquiry, the then Clerk of the House suggested:

... that the vast majority of the divisions called for in recent times is "pro-forma" or routine in nature and generally it is difficult to see a need for a cooling-off period. Whilst there will obviously be exceptions it is believed that this should no longer be considered an important issue.<sup>21</sup>

- 3.15 On the surface, at least, the dynamics of the 43<sup>rd</sup> Parliament might suggest a greater need for the occasional pause in proceedings than was considered necessary in 1996.
- 3.16 Ms Middlebrook noted that the lack of a 'cooling-off' period did not seem a concern to those parliaments that used an electronic voting system.<sup>22</sup> This issue is clearly one that could be canvassed in detail in the future.

<sup>16</sup> The Senate, *Electronic Voting*, 1990, p. 3.

<sup>17</sup> House of Representatives, *Electronic Voting*, p. 16.

<sup>18</sup> Standing Committee on Procedure, *Learning from other parliaments: Study Program 2006*, August 2006, p. 22.

<sup>19</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 5.

<sup>20</sup> House of Representatives, *Electronic Voting*, p. 23.

<sup>21</sup> Mr LM Barlin, Clerk of the House of Representatives, submission to the Standing Committee on Procedure inquiry 'Conduct of Divisions', 1996, p. 2.

<sup>22</sup> Middlebrook, 'Voting Methods in Parliament', pp. 46 and 51.

#### Opportunity for discussion

- 3.17 Loss of the opportunity to speak to colleagues, particularly to Ministers, during a division, is still considered significant. The Clerk notes that divisions provide a 'very valued opportunity' for Members to discuss matters with colleagues and Ministers.<sup>23</sup> Speaker Martin acknowledged that the opportunity would be missed.<sup>24</sup>
- 3.18 This was reiterated in the Committee's report in 2003.<sup>25</sup> The President of the Senate went further, suggesting that the time saved by electronic voting may even be lost as Senators would continue to use the time before and after a vote to consult colleagues and Ministers gathered for the vote.<sup>26</sup> The President also suggested that shortening the break in proceedings would deprive Senators of valuable preparation time between matters of business:

The time currently spent in a division provides a break in the proceedings which allows Senators responsible for the next business to get their bearings and to prepare themselves, for example, by finding relevant papers.<sup>27</sup>

3.19 This is another issue that invites more consideration in the future.

#### Increase in number of divisions

- 3.20 The Clerk noted that the ease of voting electronically may lead to Members calling for additional divisions.<sup>28</sup> Bradshaw considered this was not generally the case but conceded that it had occurred, citing the Belgian and Finnish Parliaments. Interestingly he observed that, in the United States House of Representatives, the introduction of electronic voting in 1972 had at first lead to an increase in divisions but that this was followed by a decrease.<sup>29</sup>
- 3.21 Speaker Martin noted that the Swedish Parliament appeared to have an increase in divisions after the introduction of electronic voting but that such an increase in the House would not impinge on the overall benefits:

... it is felt that given the speed of operation of the equipment any additional divisions called for and the consequent loss of the time

<sup>23</sup> Mr Wright, Clerk of the House of Representatives, Submission 1, p. 5.

<sup>24</sup> House of Representatives, Electronic Voting, p. 23.

<sup>25</sup> Standing Committee on Procedure, Review of the conduct of divisions, August 2003, p. 7.

<sup>26</sup> The Senate, *Electronic Voting*, p. 12.

<sup>27</sup> The Senate, *Electronic Voting*, p. 11.

<sup>28</sup> Mr Wright, Clerk of the House of Representatives, *Submission 1*, p. 6.

<sup>29</sup> Bradshaw, 'Methods of Voting', p. 224.

of the House would be relatively insignificant in the overall scheme of things.<sup>30</sup>

- 3.22 The results from the survey for the Association of Secretaries General of Parliaments indicated that only 6% of respondents reported an increase in divisions after the implementation of electronic voting, while 67% had no increase.<sup>31</sup>
- 3.23 There are other possibilities:

The tactical use of divisions (where there is a time limit on debate and divisions are used to fill up that time preventing the question being put by the Chair) may also be limited by a quicker division process.<sup>32</sup>

#### **Other issues**

- 3.24 Two additional issues need to be considered in more detail than has been available to this short inquiry:
  - the cost of implementing and maintaining electronic voting; and
  - the 'design integrity' of the Chamber.

#### Cost

- 3.25 The cost of implementing and maintaining an electronic voting system has been a major consideration. In 1993 Speaker Martin estimated it would cost approximately \$A2 million over three years including ongoing support costs.<sup>33</sup> In 1996 the Procedure Committee gave cost as its major reason for rejecting electronic voting as an option for improving the conduct of divisions.<sup>34</sup>
- 3.26 A decade later, the Procedure Committee recognised that the technology and the costs would have changed significantly, making it difficult to provide useful advice without more certainty:

The underlying technology, the options available and the acquisition and recurrent costs are all changing apace. It is

<sup>30</sup> House of Representatives, *Electronic Voting*, pp. 25-26.

<sup>31</sup> Middlebrook, 'Voting Methods in Parliament', p. 60.

<sup>32</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 6.

<sup>33</sup> House of Representatives, *Electronic Voting*, p. 30.

<sup>34</sup> Standing Committee on Procedure, Conduct of Divisions, November 1996, p. 5.

impossible to provide applicable information unless it is known when, if ever, electronic voting might be introduced.<sup>35</sup>

- 3.27 The Secretary of the DPS indicates that although the cost of introducing electronic voting in the past may have been prohibitive, it is 'continually decreasing'.<sup>36</sup> However, further indications about potential costs were not provided.
- 3.28 The Clerk also suggests that costs may have diminished:

With advances in technology and a reduction in cost of applications and associated hardware (for example, the cost of display screens which we believe was a significant component of the original estimate), it is likely that the cost would be much more modest than the 1994 estimates.<sup>37</sup>

3.29 There may also be some simple cost-effective alternatives that would speed up the count and details of the result of a division. The Clerk referred to the current 'pen and paper system' used by the tellers and suggested they might use tools such as iPads. This could enable names to be selected from a pre-populated list, counted concurrently, and relayed to the Speaker and Clerks' laptops. This 'may assist in a slightly quicker provision of the results of divisions beyond the chamber...', that is, the record might be available more quickly although the Clerk considered it was not clear that the actual count would be completed more quickly.<sup>38</sup>

#### Design integrity in a heritage building

- 3.30 Design difficulties may be encountered when installing an electronic voting system in the Chamber. Both the Clerk and the Secretary, DPS, drew attention to this in their submissions, although it was not an issue canvassed in previous reports.
- 3.31 The Clerk emphasised that, as had occurred with other changes to the Chamber, there would need to be consultation with the architects and 'design integrity' officers in the DPS to ensure that 'any changes do not adversely impact on the overall design' of the Chamber.<sup>39</sup>
- 3.32 Similarly, the Secretary, DPS, stated:

Whatever the technology adopted to enable electronic voting, it will be important that the original design and heritage aspects of

<sup>35</sup> Standing Committee on Procedure, Review of the conduct of divisions, p. 7.

<sup>36</sup> Ms Carol Mills, Secretary, DPS, Submission 2, p. 1.

<sup>37</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 4.

<sup>38</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 5. See also Ms Mills' submission at p. 2 where she refers to the use of mobile devices, generally, by Members.

<sup>39</sup> Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 5.

the Parliament House are maintained. Special consideration will need to be given to any fixed devices, including screens and associated wiring requirements.<sup>40</sup>

3.33 The changing nature of technology may circumvent some concerns. For example, the move to wireless connectivity may cause less disruption to the structure of the Chamber.<sup>41</sup>

#### A future inquiry

- 3.34 A future inquiry would benefit from examining several issues in detail. As well as gauging the attitude of Members to electronic voting generally, an inquiry would need to consider any necessary and desired changes to the division process if electronic voting were introduced, including whether:
  - to retain the current systems of ringing the bells, locking the doors and then voting;
  - access to voting should remain confined to the Chamber;
  - to retain the traditional 'Ayes to the right of the chair, Noes to the left'.
- 3.35 A future inquiry would also need to examine the features a system best suited to the needs of the Chamber would require, including:
  - voting stations at individual Members' desks and with or without a display screen;
  - voting stations for Members of the front bench and shadow front bench who, unlike other Members, do not have desks;
  - the inclusion or not of an 'abstain' vote button;
  - means for a Member to change his or her vote if it had been entered incorrectly.<sup>42</sup> For what period should an electronic vote remain 'open' and what impact would this have on potential time savings?
- 3.36 In addition, attention would need to be paid to the technology and its implications for the existing ICT requirements of the Chamber:
  - the interaction of the system with parliamentary procedures and systems;
  - security, privacy and authentication of Members;
  - the use of fixed or mobile devices (or both);
  - the integration of backend systems;
  - the nature of the platform;

- 41 Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 5.
- 42 Mr B Wright, Clerk of the House of Representatives, *Submission 1*, p. 3.

<sup>40</sup> Ms Carol Mills, Secretary, DPS, Submission 2, p. 2.

- a preference for wired or wireless; and
- display panels, both the type and the information to be displayed.<sup>43</sup>
- 3.37 When the basic requirements for an electronic voting system for the House have been assessed, and the options clarified in terms of technology, design, heritage, and indicative cost, then preferences can be considered in an informed way. Detailed costs of developing, implementing, and maintaining a preferred system could be obtained.
- 3.38 It may be that the potential savings in time of the House and quicker availability of division details are advantages that are too modest to justify the costs. Equally, it may be that there are other potential advantages and disadvantages that will become apparent.

#### Conclusion

- 3.39 While concerns regarding technology may have been largely addressed, the procedural and contextual issues remain. The impact of electronic voting on the work and culture of the Chamber is a significant and complex issue. It is not a matter of tradition versus modernity. Nor is it simply about technology or design or cost or efficiency, although these are all elements to be assessed. At its highest level, this can be seen as an issue about the decision-making process of one of the central institutions in the Australian system of government. At a more practical level, it can be seen to be about the way 150 people demonstrate and are seen to demonstrate their choices on the major questions of the day.
- 3.40 Maintaining the transparency and accountability of the House is critical to its strength. Continuing (and improving where possible) the visibility of Members' decision-making is a significant element of this. Members value the opportunity currently provided by divisions to move away from their allocated seats and speak informally to their colleagues and Ministers. Anecdotal evidence suggests that many consider these informal professional exchanges essential to their work and this should be considered in more detail.
- 3.41 This has been very much a preliminary examination and the Committee cannot make any considered conclusion or recommendation without details of the options and their implications. The costs will likely have decreased since the initial estimates some 20 years ago but any future

inquiry will need details about the technologies available and the likely impact of implementation.

- 3.42 Difficulties may be posed by design integrity and the heritage aspects of Parliament House and the magnificent Chamber of the House. However, other heritage buildings have implemented electronic voting and overcome the issues and concerns presented. A future inquiry will need to obtain more information on the structural issues and the way they have been dealt with in other legislatures.
- 3.43 For the present the Committee must simply acknowledge these issues and commend a more in-depth inquiry to a future Procedure Committee. It is interesting to note that the Modernisation Committee in the United Kingdom House of Commons rejected a proposal for electronic voting because, when it surveyed Members about a number of electronic voting options, there wasn't an alternative that had great support from Members.<sup>44</sup>
- 3.44 Finally, while this is a topic that interests many, the ultimate conclusion following the report of any future inquiry should rest with the House. The Clerk's reference to the 2003 report of the Procedure Committee is apt:

The Committee's view is that all Members should be allowed to express a view before the House reaches an in-principle position on electronic voting. This can best be achieved by debating the proposal in the House.<sup>45</sup>

GEOFF LYONS Chair June 2013

<sup>44</sup> House of Commons Modernisation Committee, Voting Methods, HC779, June 1998.

<sup>45</sup> House Standing Committee on Procedure, *Review of the conduct of divisions,* August 2003, p. 8; referred to at p. 6 of the Clerk's submission.

# Α

#### **Appendix A – List of submissions**

#### Submissions

- 1. Mr Bernard Wright, Clerk of the House of Representatives
- 2. Ms Carol Mills, Secretary, Department of Parliamentary Services