## **4.6 CPL Seat Allocation Overflow**

Name:	Seat Allocation Overflow in Closed Party List
ID	UC_006
Description	In closed party listing, when there is an overflow of seats allocated to a party where all their candidates have already filled their seats, the system will conduct a lottery of potential parties in parliament for the open seats. Each winner of the lottery will receive one of the seats until all seats has been filled.
Actors	Election official, testers, and programmers.
Organizational Benefits	Ensures that all seats are filled in an unbiased manner.
Frequency of Use	As frequent as when the case of overflow seats for majority party.
Triggers	There are more allocated seats than all candidates given by the party.
Preconditions	There are open seats for the lottery.
Postconditions	All seats are filled.
Main Course	<ol> <li>The user receives a notification of seat allocation for overflow and that a lottery is conducted for the open seats.</li> <li>The system will run a lottery for each seat.</li> <li>For each seat, run a random picking 1000 times and record the results. On the 1001 time, the random party picked will receive the seat (AC1, EX1).</li> <li>Once all seats have been filled, the seat allocation overflow has been resolved.</li> </ol>
Alternate Course	AC1 The winning party has all their candidate filled in a seat  1. Conduct step 3 of main course but remove the party with all allocated members from the lottery.

EX1: The party that won the lottery does not exist in the list of party provided  1. System notifies user that the party that won the lottery does not exist in the CPL
EX2: Result of lottery is biased  1. If one party wins most of the time out of the 1000 recorded results, redo step  3 of the related course (See EX3).
EX3: Repeated biased lottery If the lottery is biased 5 times, give the seat and inform to the terminal there's a possibility of bias and display the 1000 results.