

# Calculating the results at a European Parliamentary Election using the D'Hondt method

The **D'Hondt method** is a highest averages method for allocating seats in party-list proportional representation. The method described is named after Belgian mathematician Victor D'Hondt, who described it in 1878. Elections for European Parliament use this method to determine the results of candidates/parties elected.

The first seat is allocated to the party that has received the highest number of votes cast in the electoral region. Each subsequent seat is allocated to the party that has the highest number of votes after the following calculation, which is carried out after the allocation of each seat:

- the total number of votes received by each of the parties, divided by
- the number of seats that party has already been allocated plus 1

At every stage of the calculation the figure to be divided is the **original** vote total for the party or individual candidate. In calculating figures, when the calculation of the total at any stage includes a fraction, that fraction must be taken into account and it must not be rounded.

The seats each political party is allocated are filled by the candidates in the order in which their names appear on their party list.

Once a party has been allocated as many seats as there are candidates on its list, they are not included in the calculation for the allocation of the remaining seats.

## Worked example of allocation of seats

	Party A	Party B	Party C	Party D	Party E
<b>Votes</b>	330,000	280,000	160,000	60,000	15,000
<b>Seat 1</b>	<b>330,000</b>	280,000	160,000	60,000	15,000
<b>Seat 2</b>	165,000	<b>280,000</b>	160,000	60,000	15,000
<b>Seat 3</b>	<b>165,000</b>	140,000	160,000	60,000	15,000
<b>Seat 4</b>	110,000	140,000	<b>160,000</b>	60,000	15,000
<b>Total seats</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

In the worked example in the table above there are four seats available and these have been allocated as follows:

- ☑ **Seat 1** – Party A obtained the highest number of votes (330,000) and is therefore entitled to the first available seat.
- ☑ **Seat 2** – The allocation of the next seat is calculated by dividing the total number of votes each party received by the number of seats it has already been allocated in the region, plus one. As a result, Party A's original total must be divided by two, while the other parties' totals are still divided by one and so remain the same. Party B, with its total of 280,000, wins the second seat.
- ☑ **Seat 3** – To calculate the allocation of the third seat, both Party A's and Party B's total number of votes are divided by two, while Party C, Party D and Party E still have their totals divided by one. This results in this seat being allocated to Party A with its total of 165,000.
- ☑ **Seat 4** – As Party A now has two seats, its original total of 330,000 is divided by three. At this stage, Party C, with a total of 160,000, wins the fourth and final seat.