

Why d'Hondt or some other method is needed to allocate seats

There has always been an arithmetic error in the electoral law (currently art 165 of Lei n.º 2/2019 de 31 de Maio) which is that the number of AR seats per province is calculated by dividing the number of registered voters by 248 and then using that number to assign seats by province. That does not work because sometimes it sometimes assigns 247, 248 or 249 seats. The CNE then acts entirely in secret, without ever publicising what it does, to give or take away a seat.

To see why this happens, take this very simple example, of 3 provinces with 3 assembly seats, and assume we have 12 registered votes. That give us 4 voters per seat.

If each province has 4 voters, then each gets one seat, and everything is OK.

But consider:

Province A - 5 voters

Province B - 5 voters

Province C - 2 voters

Then provinces A and B get 1 seat each and province C gets none, which means only 2 of the 3 seats are assigned.

More than 100 years ago when many electoral systems were being defined, several methods were created to assign the final seat. D'Hondt remains the most popular, but two other are Sainte-Lague and Hare. In those pre-computer days, all were designed to be easy to do with pencil and paper. A good detailed explanation is on <https://www.electoral-reform.org.uk/what-is-the-difference-between-dhondt-sainte-lague-and-hare/>