

REWARDS CALCULATION FORMULA

We created the most fair formula for distributing the rewards earned each month.

Two important factors have been considered:

- for calculating staking time, the day after we receive native FSN from individual is considered for the first staking day;
- when distributing the rewards, some assets will be used as gas. That is why we use only 2 decimal numbers when calculating and distributing the rewards!

In formula we use:

R_i = reward for individual to be calculated

R_{tot} = total rewards node has earned in period of time (one calendar month), lowered by the 12,5% management fee

FSN_i = (total days within month individual has participated in staking) x (amount he was staking)

FSN_{tot} = sum of FSN_i for all individuals that participated in the staking within the month.

$$R_i = R_{tot} \times FSN_i / FSN_{tot}$$

EXAMPLE

We explain the above mentioned formula, we have a simulation with five individuals. Each joins on different day and stakes different amount.

Individual 1 = I1 / joins 1.7.2019 (30 days) / stakes 2.300 FSN

Individual 2 = I2 / joins 9.7.2019 (22 days) / stakes 4.000 FSN

Individual 3 = I3 / joins 16.7.2019 (15 days) / stakes 750 FSN

Individual 4 = I4 / joins 28.7.2019 (3 days) / stakes 1.650 FSN

Individual 5 = I5 / joins 30.7.2019 (1 day) / stakes 250 FSN

R_{tot} = Total rewards earned in month 7 year 2019 and lowered for 12,5% management fee = 115 FSN

$$FSN_{tot} = 2.300 \times 30 + 4.000 \times 22 + 750 \times 15 + 1.650 \times 3 + 250 \times 1 = 173.450 \text{ FSN days}$$

$$R_1 = 115 \text{ FSN} \times (2.300 \text{ FSN} \times 30 \text{ days}) / 173.450 \text{ FSN days} = 45,748 \text{ FSN}$$

$$R_2 = 115 \text{ FSN} \times (4.000 \text{ FSN} \times 22 \text{ days}) / 173.450 \text{ FSN days} = 58,345 \text{ FSN}$$

$$R_3 = 115 \text{ FSN} \times (750 \text{ FSN} \times 15 \text{ days}) / 173.450 \text{ FSN days} = 7,458 \text{ FSN}$$

$$R_4 = 115 \text{ FSN} \times (1.650 \text{ FSN} \times 3 \text{ days}) / 173.450 \text{ FSN days} = 3,281 \text{ FSN}$$

$$R_5 = 115 \text{ FSN} \times (250 \text{ FSN} \times 1 \text{ day}) / 173.450 \text{ FSN days} = 0,165 \text{ FSN}$$

$$R_1 + R_2 + R_3 + R_4 + R_5 = 114,997 \text{ FSN}$$