According to the Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply, the N – 1 formula describes the ability of the technical capacity of the gas infrastructure to satisfy total gas demand in the calculated area in the event of disruption of the single largest gas infrastructure during a day of exceptionally high gas demand occurring with a statistical probability of once in 20 years. The technical capacity of all remaining available gas infrastructure in the event of disruption of the single largest gas infrastructure shall be at least equal to the sum of the total daily gas demand of the calculated area during a day of exceptionally high gas demand occurring with a statistical probability of once in 20 years. The results of the N – 1 formula shall be at least equal to 100 %.

The infrastructure standard should oblige Member States to maintain a minimum level of infrastructure such as to ensure a degree of redundancy in the system in the event of a disruption of the single largest gas infrastructure. Each Member State shall ensure that the technical capacity of the remaining infrastructure, determined in accordance with the N – 1 formula, is able to satisfy total gas demand of the calculated area during a day of exceptionally high gas demand. Where appropriate, neighbouring Member States may agree to fulfil, jointly, the obligation.

The N – 1 formula calculation shall refer only to EU countries, even if there are bilateral transmission agreements in place between a Member State and a non-EU country.