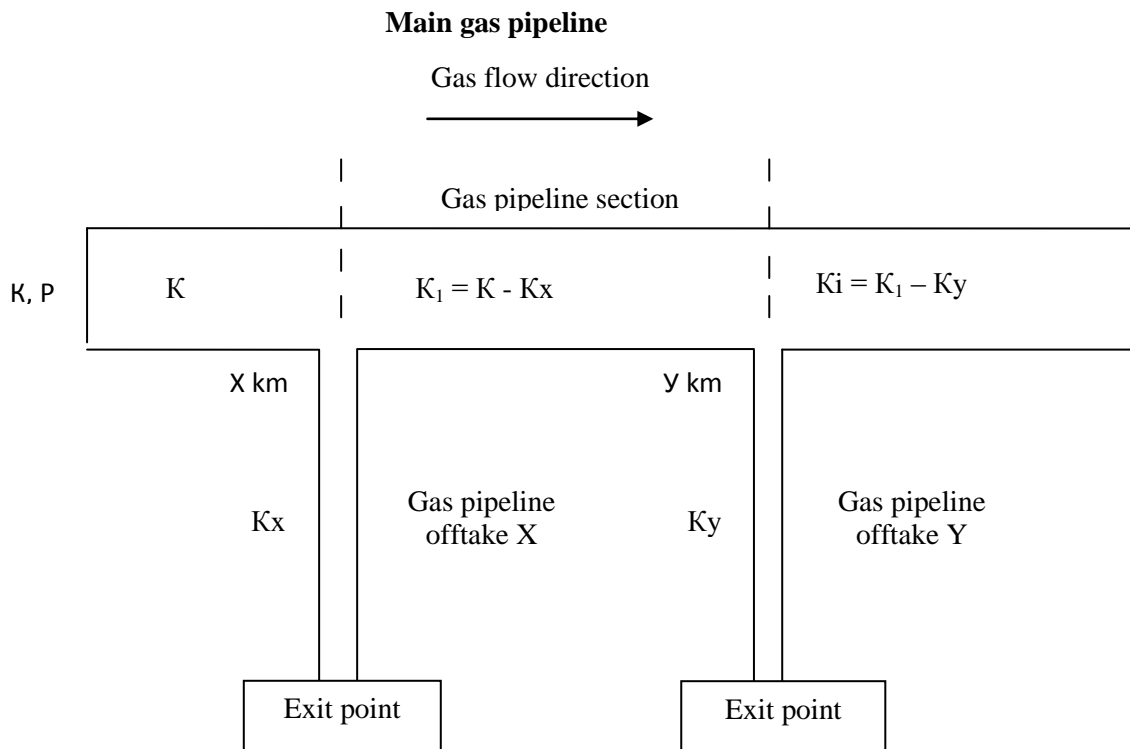


## Technical Capacity Calculation Methodology

for main gas pipeline section and gas pipeline offtake to exit points



$K$  – entry point capacity

$K_i$  - capacity of a section between two offtakes  $i$ , where  $i = 1 \div 100$

$K_x$  - gas pipeline offtake capacity  $x$ , where  $x = 1 \div 100$

Main gas pipeline capacity is calculated based on the maximum quantity entering the gas transmission system entry point, the pressure and gas pipeline technical parameters. To calculate the capacity of kilometer  $X$  in the gas flow direction from the entry point, the technical capacity calculated for the offtakes preceding kilometer  $X$  shall be considered.

1. Entry point technical capacity –  $K$  (capacity) and  $P$  (pressure).
2. Pressure drop at kilometer  $X$  – to be calculated (end pressure equation).
3. Offtake at kilometer  $X$  – calculation of offtake capacity (maximum possible volumetric flow rate equation).
4. Pressure drop at kilometer  $Y$  – calculated by reducing the entry capacity with the capacity of offtake  $X$  (end pressure equation).
5. Offtake at kilometer  $Y$  – calculation of offtake capacity (maximum possible volumetric flow rate equation).
6. Pressure drop at kilometer ...

The combined operator can relocate technical capacity depending on gas transmission system regime of operation or any material changes in the nominated and confirmed quantities for transmission. All possible combinations are, provided that system integrity and compliance with exit points contractual parameters are satisfied.