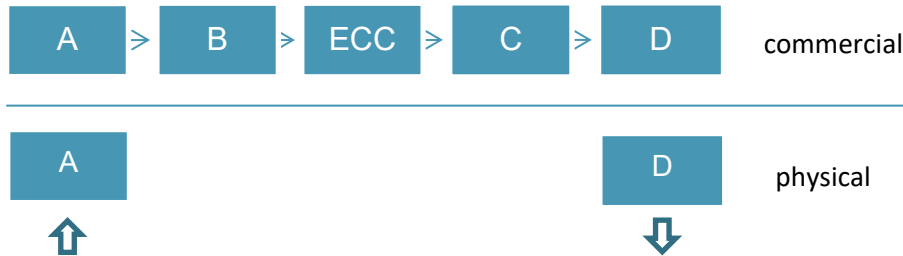
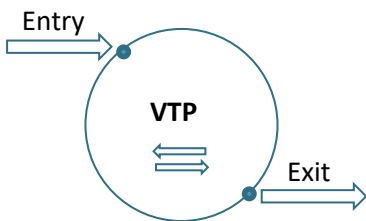


What happens if the gas supply stops?

The European natural gas markets are contractually divided into the physical gas flow layer and the commercial gas rights layer.



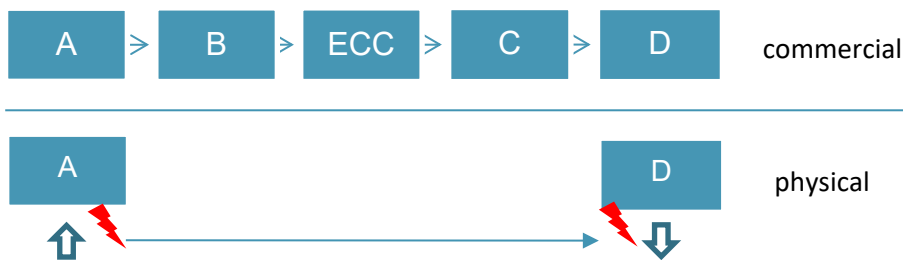
The physical layer works on an Entry/Exit model (Members A and D in the picture above) and commercial layer works within so called virtual trading points (VTPs) (Members A, B, C, D and ECC in the picture above).



The physical gas flow layer

Transmission System Operators (TSOs) have contracts with natural gas suppliers which on their side have contracts with gas extractors (upstream), they will extract the gas and bring it to a boarder point (entry point – for gas injection / exit point – for gas withdraw). Suppliers will conduct transport contracts with TSOs to inject gas at an entry point. They also need this kind of contract if they want to deliver to the distribution network and thus want to withdraw gas at an exit point. If an insufficient amount of gas is injected at an entry point, the TSOs have several mechanisms to balance the grid (use storage/use line packing/use curtailments); a merit order applies here to always use the mildest measure first. The TSO will curtail an exit point to balance the grid only as a last resort.

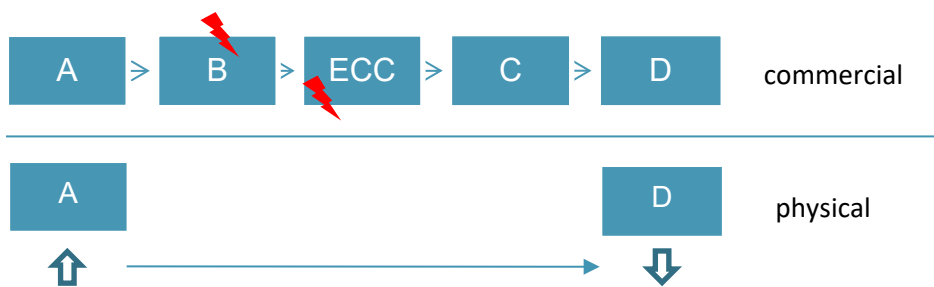
The effects of a missing gas flow are illustrated as follows:



The commercial gas rights layer

Each market area has a virtual trading point, where natural gas, more specifically rights relating to natural gas are traded. Since only rights within the specific market area are traded, the settlement of the relevant contracts has no immediate impact on the physical gas flow layer. The physical layer is affected by a lot of elements such as temperature, pressure or quality of gas. This does not apply to the VTP, where the rights that are traded are fully fungible. It is the responsibility of the TSO who owns and operates both the grid and the VTP that buyers receive the good in the quality and amount traded when the rights are executed at an exit point. ECC is only active on the VTP, transferring rights from one party to another on the VTP and thus is itself always balanced due to the nature of trade execution (ECC nominates at the same time both Buy and Sell Trades). In case of a gas flow interruption, a curtailment of ECC as the central counterparty is ineffective as it would require a curtailment of the whole chain (see above) causing effort and net in the same result that D in this example would be curtailed. This is why TSOs normally only curtail on the physical layer and never on commercial layers.

One scenario in which ECC could be affected on the commercial layer is an ad-hoc suspension of a customer B by a TSO:



This would set ECC into the position where the clearing house would need to deliver to C but would not receive the good from B because B left the market. This would create an imbalance payment to be ultimately covered by B or its clearing member.