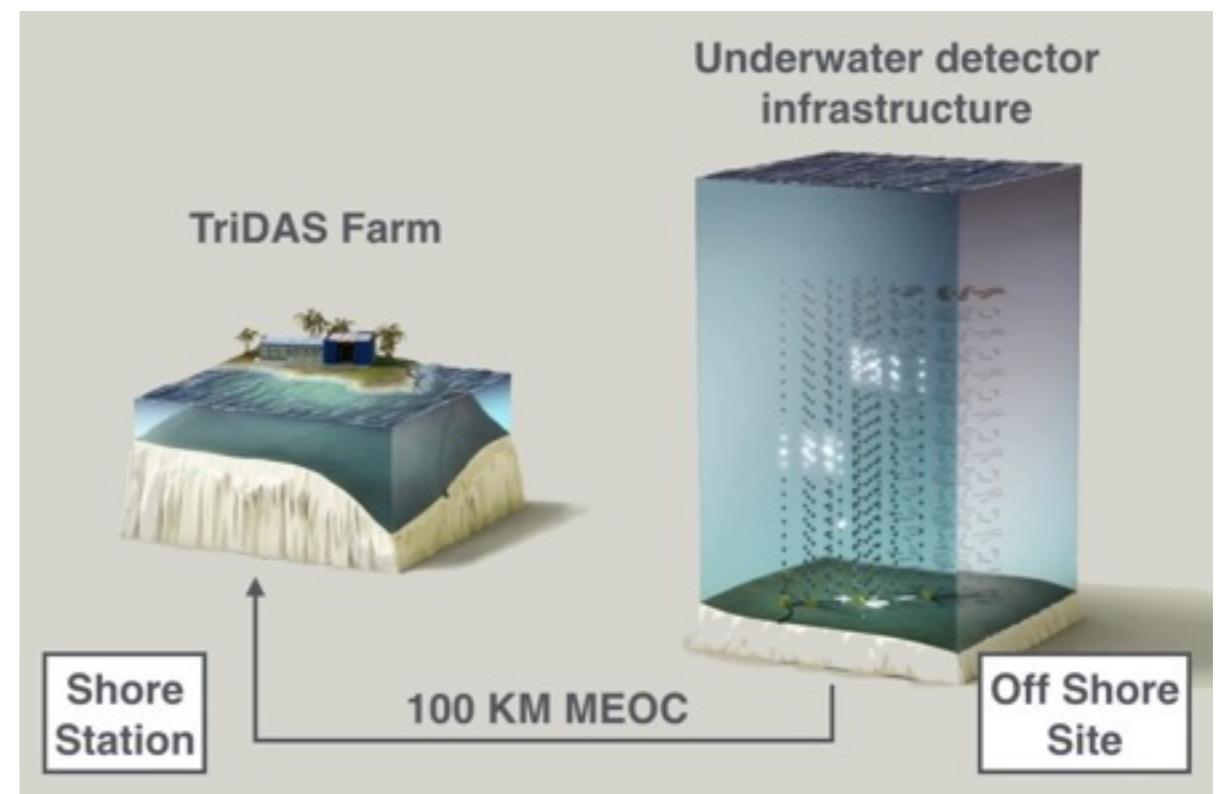


# The Trigger and Data Acquisition System for the KM3NeT-Italy neutrino telescope

- KM3NeT-Italy is an INFN project to build the inner core of the multi-km<sup>3</sup> size KM3NeT neutrino telescope
- The detector foresees ~700 optical modules (OMs) arranged in 8 vertical structures called towers
- The throughput from the sea can reach ~30 Gbps
- The “all data to shore” approach is followed in order to reduce the complexity of the detector



# The Trigger and Data Acquisition System for the KM3NeT-Italy neutrino telescope

- The TriDAS software has been developed to collect, process and filter all the data coming from the detector
- A 10 Gbps ethernet network is required in order to handle the expected data throughput
- Data streams are split in slices of a fixed time duration
- After a two-step aggregation phase, data are analyzed and the found events are persistently stored
- The whole acquisition system can be controlled by a graphical user interface

