

# Project Name: Remote Monitoring and Operation of Fish Farming (Pisciculture) Ponds (Kibbutz Beit Alfa, Israel)

### **Background:**

In 2010, RealiteQ was asked to provide a comprehensive and central solution for the remote monitoring and operation of all essential systems, including oxygenating the fish feeders, and all the other essential elements for optimal fish farming in the Kibbutz Beit Alfa fish ponds



### Requirement:

For optimal fish farming, real-time data from the fish ponds that are spread over a large and remote area must be available. The data must be coordinated at the level of local and wireless control for short distances of about 200 to 300 meters, all of which must be combined in a data coordinator that creates an active control center (remote) for all the parameters.

### Project Description:

Electricity cupboards with a local control (wireless) were prepared around each fish pond, for controlling all the required parameters – air, food, engines, etc. The uniqueness of the local wireless communications was utilized for coordinating the data around the pond and the exit to the RealiteQ system from the central unit for each pond – ICEX-R.3.0.



## Unique Capabilities:

Connecting the multiple local end units to a single coordinating ICEX unit for the whole site and for remote command and control of all the systems in real time.

The major advantage is that there is no restriction on the geographic area for command and control (there is no need to deploy communications infrastructure between the various sites) or on receipt of warning data and analysis capability for each of the parameters according to reports and graphs, and in this way it is possible to have better knowledge of what is happening.

### **Conclusion and Results:**

The project was most successful and the customer was very satisfied with the results. In view of his great satisfaction, the project was enlarged in the second stage to include more of the customer's fish ponds, including ponds in an area 100 km away from the customer's position.

