



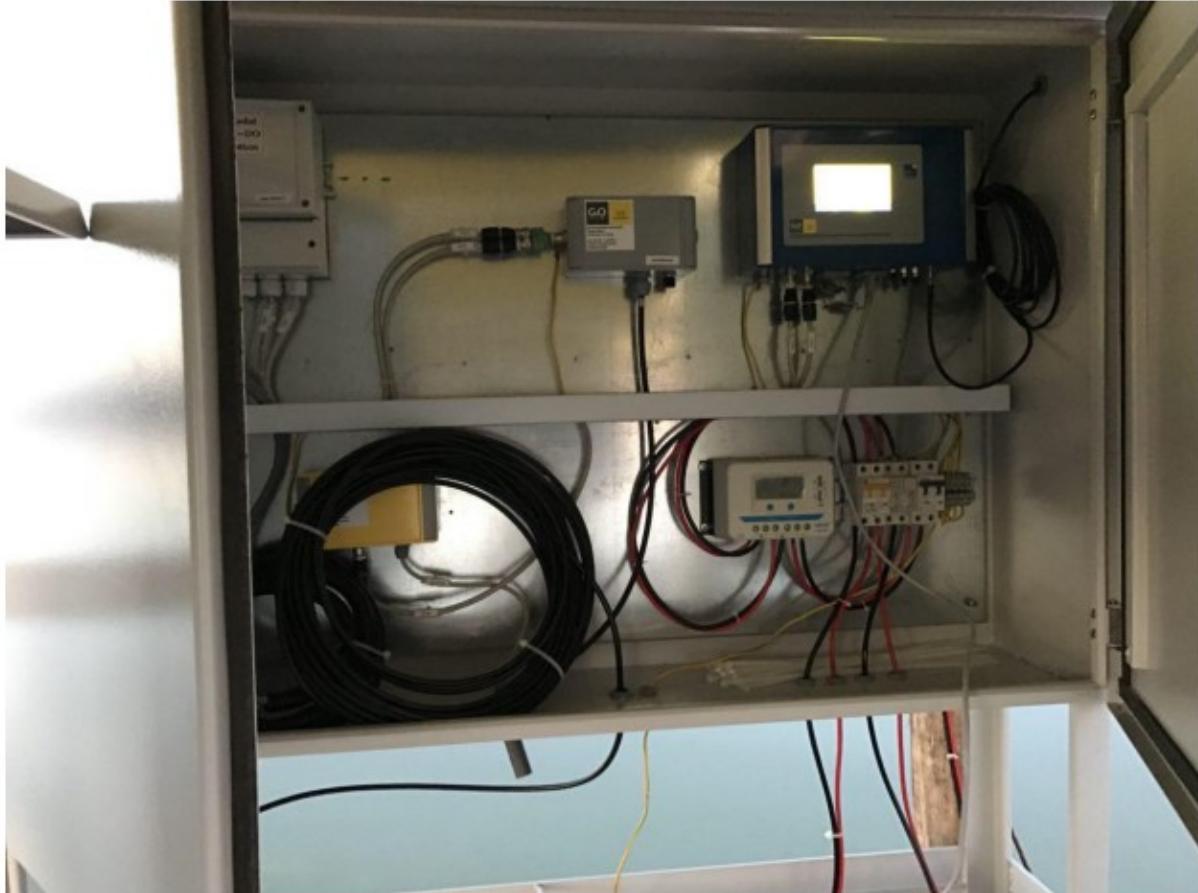
**BABENVIRO COMPANY**

**Solduz Wetland**

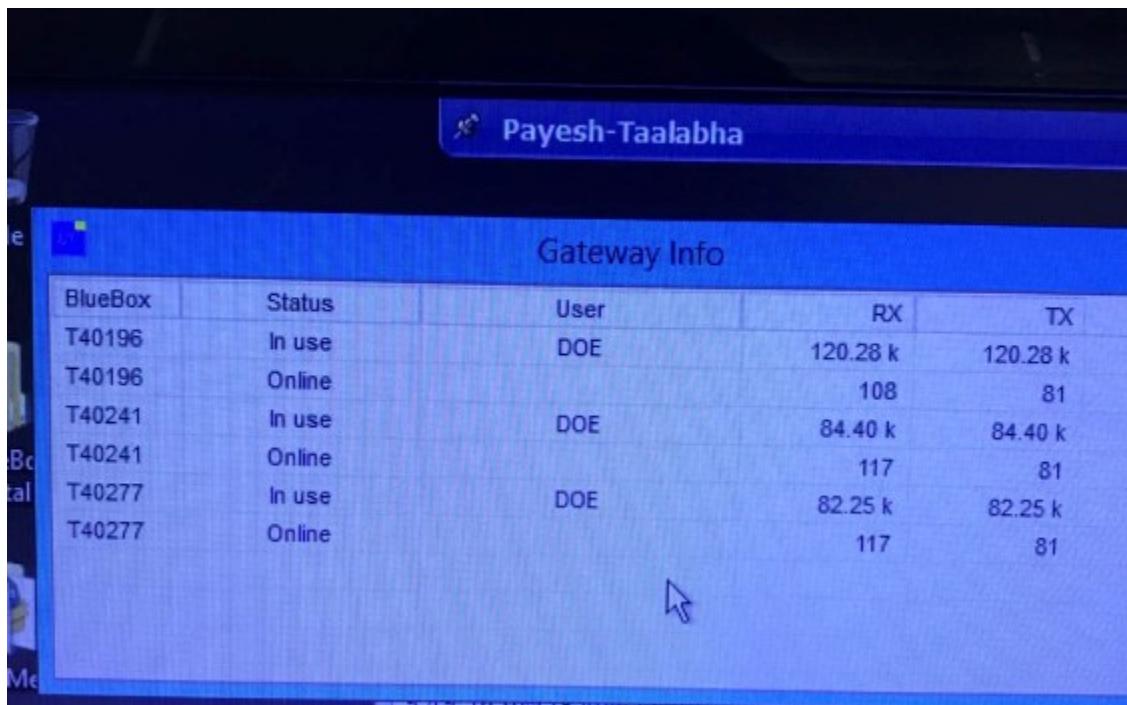
**Introduction:**

In 4 January 2018, Solduz online station was installed. In this station, EC, DO, Water Temperature, Water Level, Air Temperature, Air Humidity and Air Pressure have been measuring. Sensors which belong to GO-Sys Company, are connected to a central transmitter by name of BlueBox, that all data can be seen on a colorful display. The power of station is supplied by solar panel.

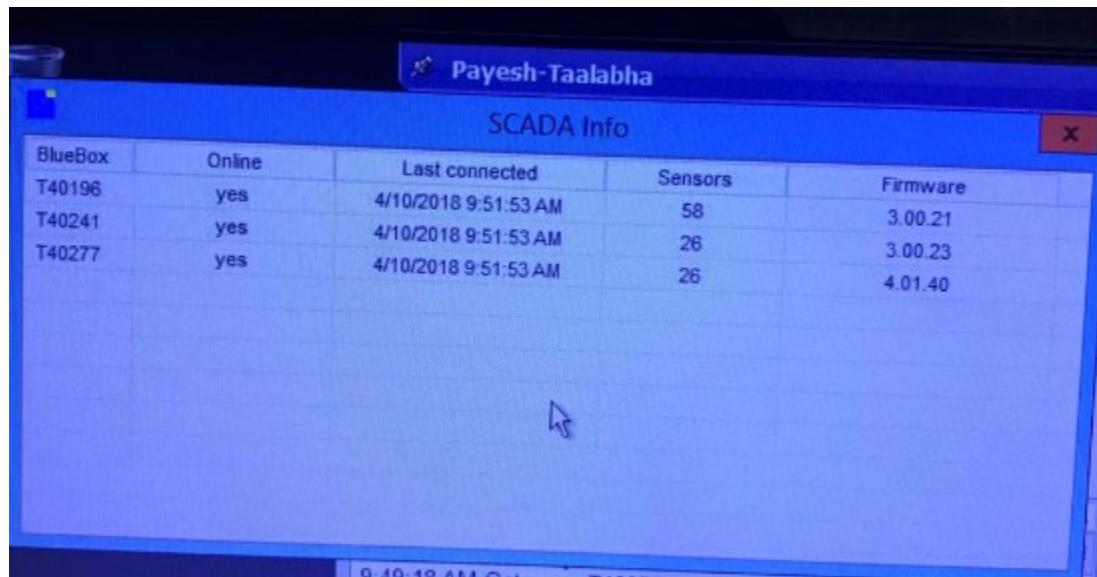




Simultaneously with running of station, installation of BCDriver for receiving Online data in server room of DOE started. After changing some Gateway settings of BlueBoxes Transmitter on station, online data started to be forwarded to server system on 17 February 2018.

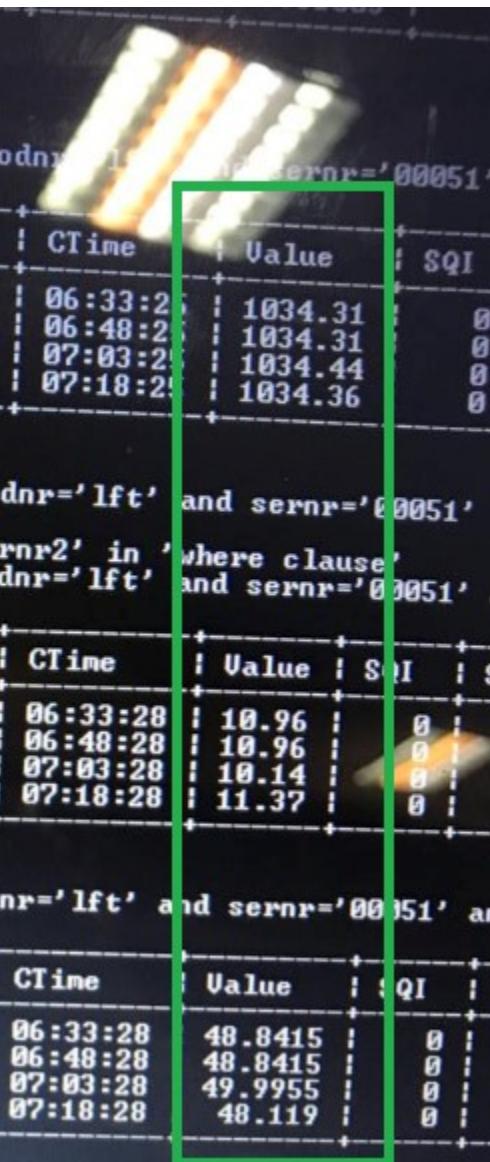


BlueBox	Status	User	RX	TX
T40196	In use	DOE	120.28 k	120.28 k
T40196	Online		108	81
T40241	In use	DOE	84.40 k	84.40 k
T40241	Online		117	81
T40277	In use	DOE	82.25 k	82.25 k
T40277	Online		117	81



BlueBox	Online	Last connected	Sensors	Firmware
T40196	yes	4/10/2018 9:51:53 AM	58	3.00.21
T40241	yes	4/10/2018 9:51:53 AM	26	3.00.23
T40277	yes	4/10/2018 9:51:53 AM	26	4.01.40

And here there is the format of receiving data on Driver which shows measuring values of Air Temp, Relative humidity, Air Pressure:



```

mysql> use solduz
Database changed
mysql> select * from sensordata where prodnr='lft' and sernr='00051' and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate   | CTime   |
+-----+-----+-----+-----+-----+
| lft    | 00051 | 1        | 2018-04-16 | 06:33:28 |
| lft    | 00051 | 1        | 2018-04-16 | 06:48:28 |
| lft    | 00051 | 1        | 2018-04-16 | 07:03:28 |
| lft    | 00051 | 1        | 2018-04-16 | 07:18:28 |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from sensordata where prodnr='lft' and sernr='00051' and cdate=DATE(NOW());
ERROR 1054 (42S22): Unknown column 'sensornr2' in 'where clause'
mysql> select * from sensordata where prodnr='lft' and sernr='00051' and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate   | CTime   |
+-----+-----+-----+-----+-----+
| lft    | 00051 | 2        | 2018-04-16 | 06:33:28 |
| lft    | 00051 | 2        | 2018-04-16 | 06:48:28 |
| lft    | 00051 | 2        | 2018-04-16 | 07:03:28 |
| lft    | 00051 | 2        | 2018-04-16 | 07:18:28 |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from sensordata where prodnr='lft' and sernr='00051' and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate   | CTime   |
+-----+-----+-----+-----+-----+
| lft    | 00051 | 3        | 2018-04-16 | 06:33:28 |
| lft    | 00051 | 3        | 2018-04-16 | 06:48:28 |
| lft    | 00051 | 3        | 2018-04-16 | 07:03:28 |
| lft    | 00051 | 3        | 2018-04-16 | 07:18:28 |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

## Online data of Water level, DO, EC, Water Temperature

```
mysql> select * from sensordata where prodnr='ise' and sernr='00108' and r=1 and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate | CTime | Value | SQI | Status |
+-----+-----+-----+-----+-----+-----+-----+-----+
| ise    | 00108 | 1         | 2018-04-16 | 06:33:57 | 105.335 | 0   |          |
| ise    | 00108 | 1         | 2018-04-16 | 06:48:57 | 105.335 | 0   |          |
| ise    | 00108 | 1         | 2018-04-16 | 07:03:57 | 105.281 | 0   |          |
| ise    | 00108 | 1         | 2018-04-16 | 07:18:57 | 105.281 | 0   |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from sensordata where prodnr='bbm' and sernr='00137' and r=1 and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate | CTime | Value | SQI | Status |
+-----+-----+-----+-----+-----+-----+-----+-----+
| bbm   | 00137 | 1         | 2018-04-16 | 06:26:40 | 3.35731 | 0   |          |
| bbm   | 00137 | 1         | 2018-04-16 | 06:41:34 | 3.35731 | 0   |          |
| bbm   | 00137 | 1         | 2018-04-16 | 06:56:28 | 2.75413 | 0   |          |
| bbm   | 00137 | 1         | 2018-04-16 | 07:11:22 | 2.68977 | 0   |          |
| bbm   | 00137 | 1         | 2018-04-16 | 07:26:16 | 2.2467  | 0   |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from sensordata where prodnr='bbm' and sernr='00137' and r=3 and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate | CTime | Value | SQI | Status |
+-----+-----+-----+-----+-----+-----+-----+-----+
| bbm   | 00137 | 3         | 2018-04-16 | 06:26:40 | 5250.47 | 0   |          |
| bbm   | 00137 | 3         | 2018-04-16 | 06:41:34 | 5250.47 | 0   |          |
| bbm   | 00137 | 3         | 2018-04-16 | 06:56:28 | 5250.47 | 0   |          |
| bbm   | 00137 | 3         | 2018-04-16 | 07:11:22 | 5250.47 | 0   |          |
| bbm   | 00137 | 3         | 2018-04-16 | 07:26:16 | 5250.47 | 0   |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from sensordata where prodnr='bbm' and sernr='00137' and r=4 and cdate=DATE(NOW());
+-----+-----+-----+-----+-----+-----+-----+-----+
| ProdNr | SerNr | SensorNr | CDate | CTime | Value | SQI | Status |
+-----+-----+-----+-----+-----+-----+-----+-----+
| bbm   | 00137 | 4         | 2018-04-16 | 06:26:40 | 12.9848 | 0   |          |
| bbm   | 00137 | 4         | 2018-04-16 | 06:41:34 | 12.9848 | 0   |          |
| bbm   | 00137 | 4         | 2018-04-16 | 06:56:28 | 13.1222 | 0   |          |
| bbm   | 00137 | 4         | 2018-04-16 | 07:11:22 | 13.1935 | 0   |          |
| bbm   | 00137 | 4         | 2018-04-16 | 07:26:16 | 13.2564 | 0   |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

In continuing of online station and BCDriver installation, a comprehensive guide line was prepared by BABenviro Company, which is about all points of wetlands of Iran. Main goal of this guide line is expressing the importance of systematic look at the implementation of its monitoring project in Iran which was delivered to DOE on 10 March 2018.

# شیوه نامه پایش اکو سیستمی تالاب های ایران

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