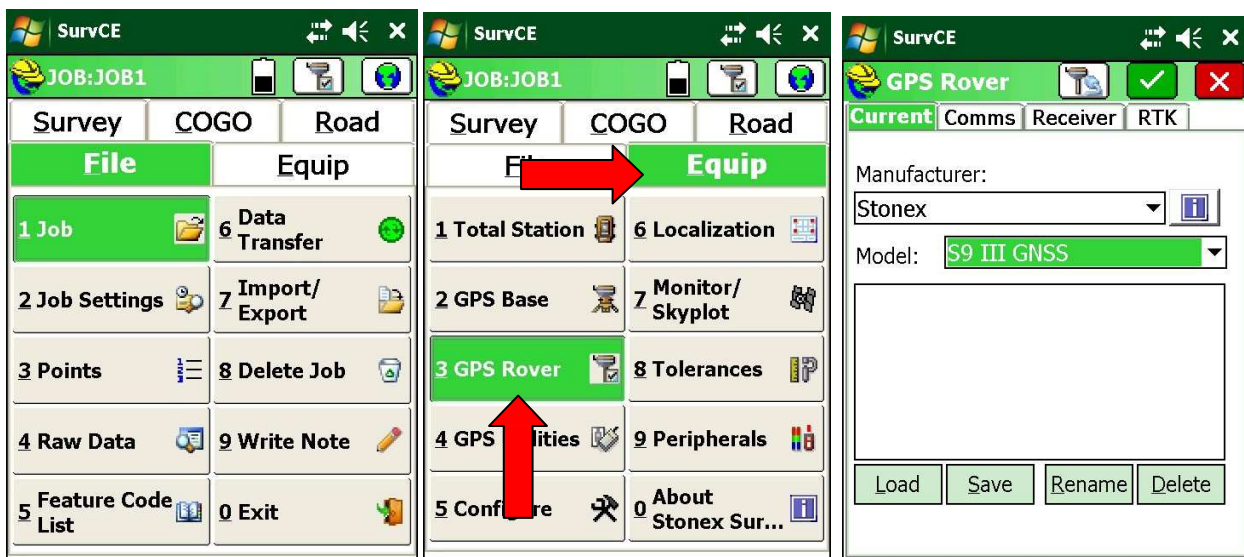


SurvCE: Stonex receiver configuration for use of NTRIP connections

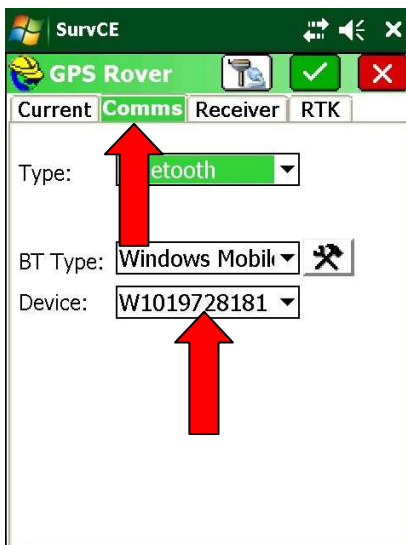
Attention: in the receiver must be inserted a SIM card enabled for GPRS Internet connection, in which was previously disabled the PIN code.

1. Bluetooth connection between PDA and receiver **S9III/S8**

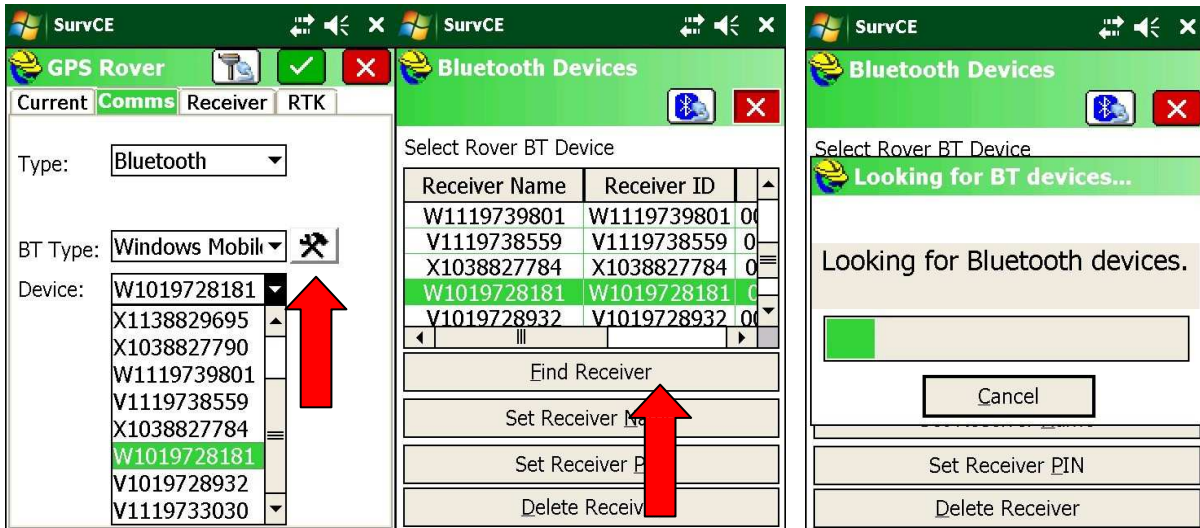
From the main menu, select Equip → GPS Rover → Current, verify that the correct model is selected (“S9 III GNSS” or “S8 GNSS”), otherwise select it.



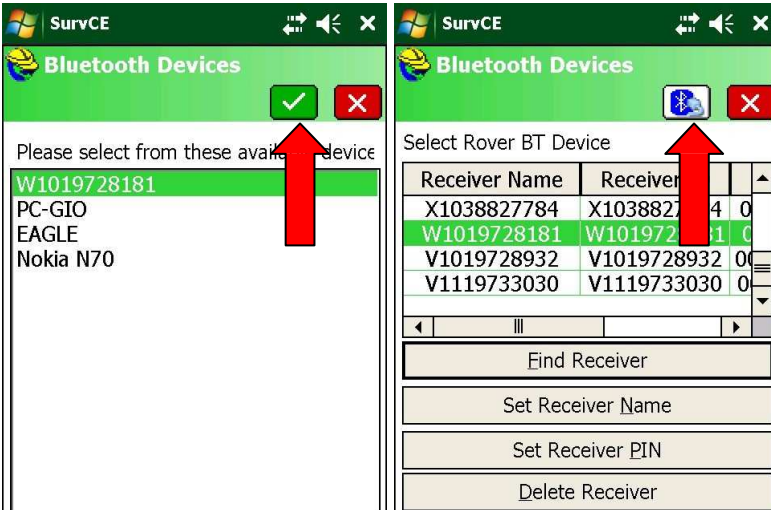
Then move in submenu “Comms”, verify that, in the “Device” box, there is the serial number of your receiver: if so go to step 2.



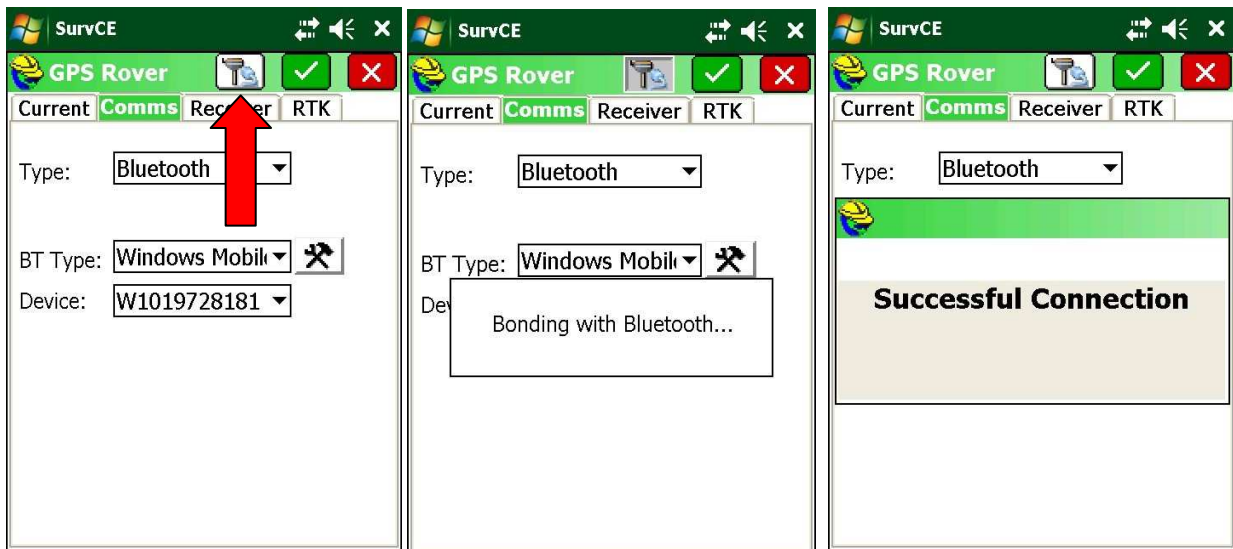
1A. Otherwise, open the box and search between the devices stored; if there is not, click on the icon with hammer and wrench , then click Find Receiver; the handheld device will search all nearby Bluetooth devices.



Then select the correct serial number, click on green button with white check sign to confirm, then click the blue icon (with BT symbol) to start the connection.



1B. Once back on the page Comms and verified that the serial of the device is correct, click the middle icon (with a receiver and a plug) at the top to complete the Bluetooth connection. If the message "Successful Connection" appears, the connection between the handheld and the receiver is complete.

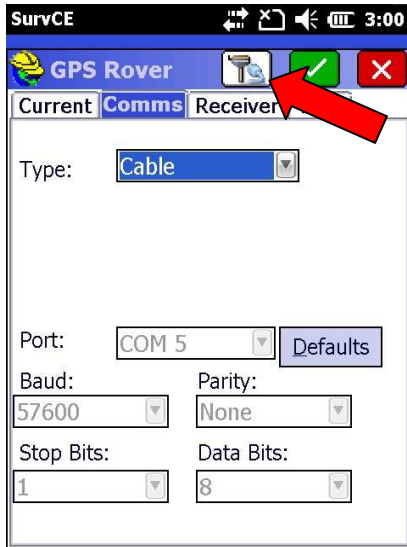


2. Connection to the S7-G receiver

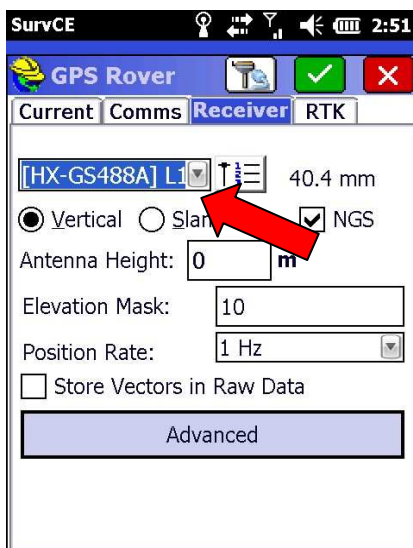
From the main menu, select Equip → GPS Rover → Current, verify that the correct model S7-G is selected, otherwise select it.



Then move in submenu "Comms" and verify that in Type box "Cable" is selected, then push the showed icon for establishing the connection to the S7 GNSS board.

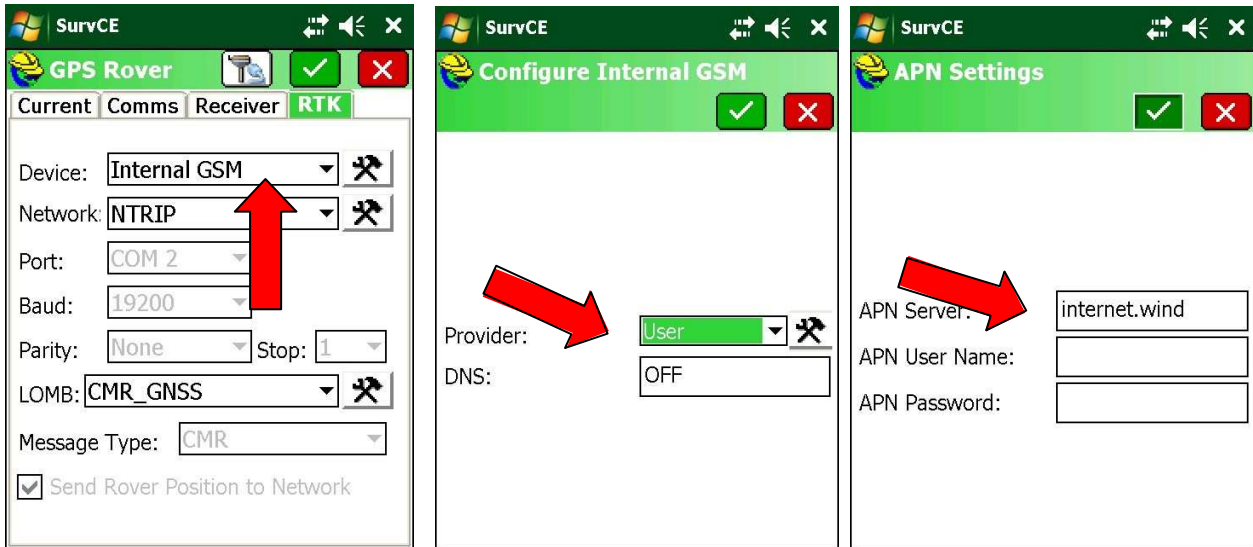


In "Receiver" submenu you can select the internal or external antenna:

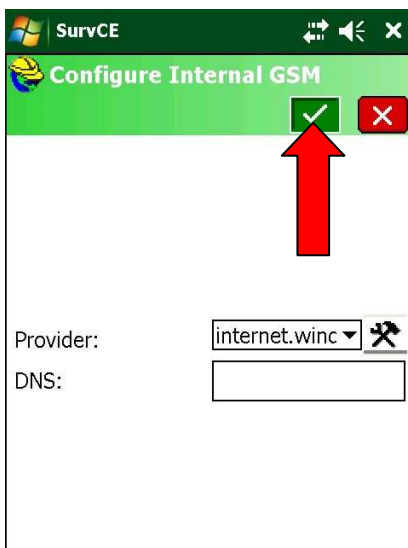


3. Inserting the parameters for the connection to the Internet (**S9III/S8**)

Within the menu "Rover GPS", go into "RTK" sub-menu, select "Internal GSM" in "Device" box, press the icon with hammer and wrench immediately on the right; once in the next page, select "User" as Provider, press the icon with hammer and wrench again on the right, then enter the APN for the cellular phone network provider that you are using. For example for WIND in Italy it is "internet.wind" in "APN server" and empty all the other fields for User Name and Password. Other companies outside Italy may request also the User Name and Password.



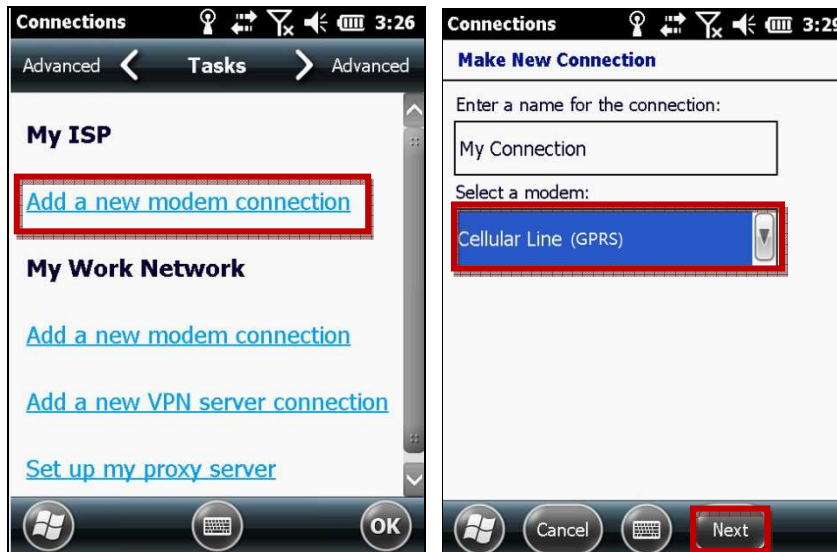
Confirm twice the green button, the message "Device Configured" should appear.



4. Inserting the parameters for the connection to the Internet (**S7-G**)

First of all it is necessary to set the internet connection in the Windows menu, because S7 device looks for an already existing connection and you don't have the possibility of create a new one from SurvCE. So quit SurvCE and create a new connection from Windows:

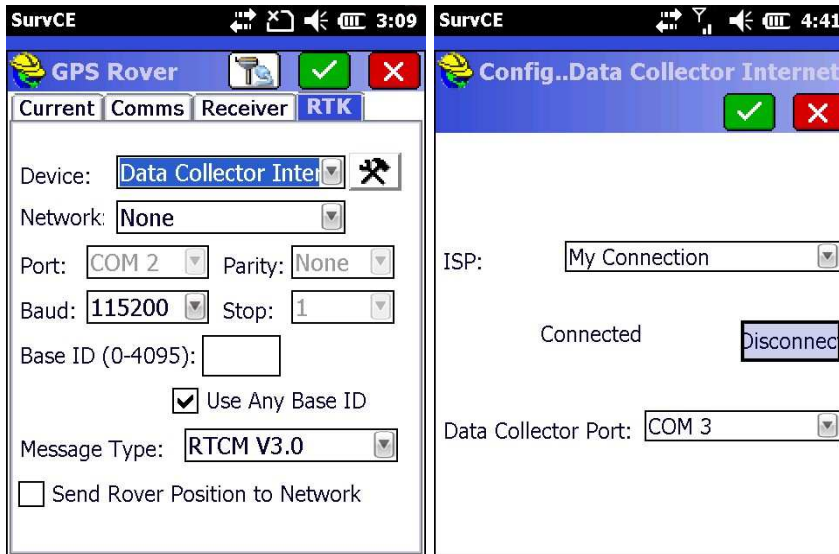
- Follow the path Start menu/Settings/Connections/Connections.
- Click "Add a new modem connection" in the page "Tasks".
- In "Select a modem" choose "Cellular line (GPRS)" and click on Next.



- d. Input the name of access point such as “cmnet”, then click on **Next**. If requested by phone company insert also username and password, after that click on **Finish**.

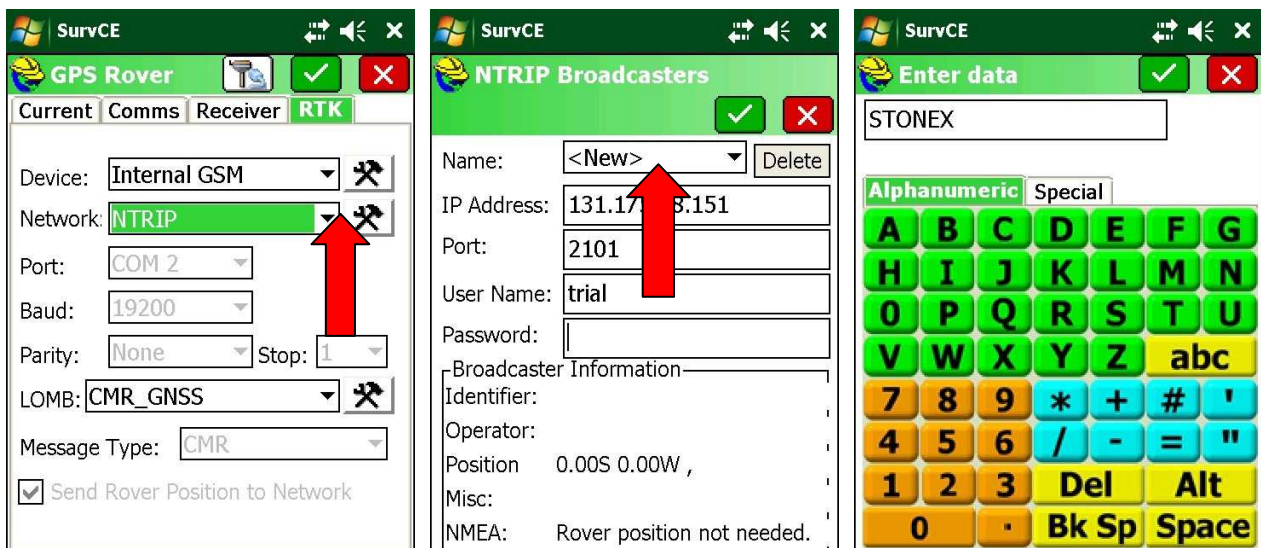


Restart the software, reconnect to the S7-G board, then within the menu “Rover GPS”, go into “RTK” submenu, select "Data Collector Internal" in “Device” box, press the icon with hammer and wrench immediately on the right; select the connection previously defined in Windows menu, check that it is show “connected”, on the contrary push “Connect”, then confirm with the green icon.



5. Inserting the parameters of the NTRIP network (**all devices**)

Select in the box named “Network” the option "NTRIP": then click on the box with hammer and wrench immediately on the right, to open the next page: when in the next page, in “name” box select New, to create a new name for the network.



Then enter the IP address of the network (for example, the network Stonex here in Italy has IP 62.149.226.152), the port (2101 for Stonex Network), then insert the assigned User Name and Password; after that, confirm the configuration in the usual way.

SurvCE

NTRIP Broadcasters

Name: STONEX [Delete]

IP Address:

Port: 2101

User Name: trial

Password:

Broadcaster Information

Identifier:

Operator:

Position 0.00S 0.00W ,

Misc:

NMEA: Rover position not needed.

SurvCE

NTRIP Broadcasters

Name: STONEX [Delete]

IP Address: 62.149.226.152

Port: 2101

User Name: trial

Password:

Broadcaster Information

Identifier:

Operator:

Position 0.00S 0.00W ,

Misc:

NMEA: Rover position not needed.

SurvCE

NTRIP Broadcasters

Name: STONEX [Delete]

IP Address: 62.149.226.152

Port: 2101

User Name: trial

Password:

Broadcaster Information

Identifier:

Operator:

Position 0.00S 0.00W ,

Misc:

NMEA: Rover position not needed.

SurvCE

NTRIP Broadcasters

Name: STONEX [Delete]

IP Address: 62.149.226.152

Port: 2101

User Name: stonex999

Password: 12345678

Broadcaster Information

Identifier:

Operator:

Position 0.00S 0.00W ,

Misc:

NMEA: Rover position not needed.

SurvCE

NTRIP Broadcasters

Name: STONEX [Delete]

IP Address: 62.149.226.152

Port: 2101

User Name: stonex999

Password: 12345678

Broadcaster Information

Identifier:

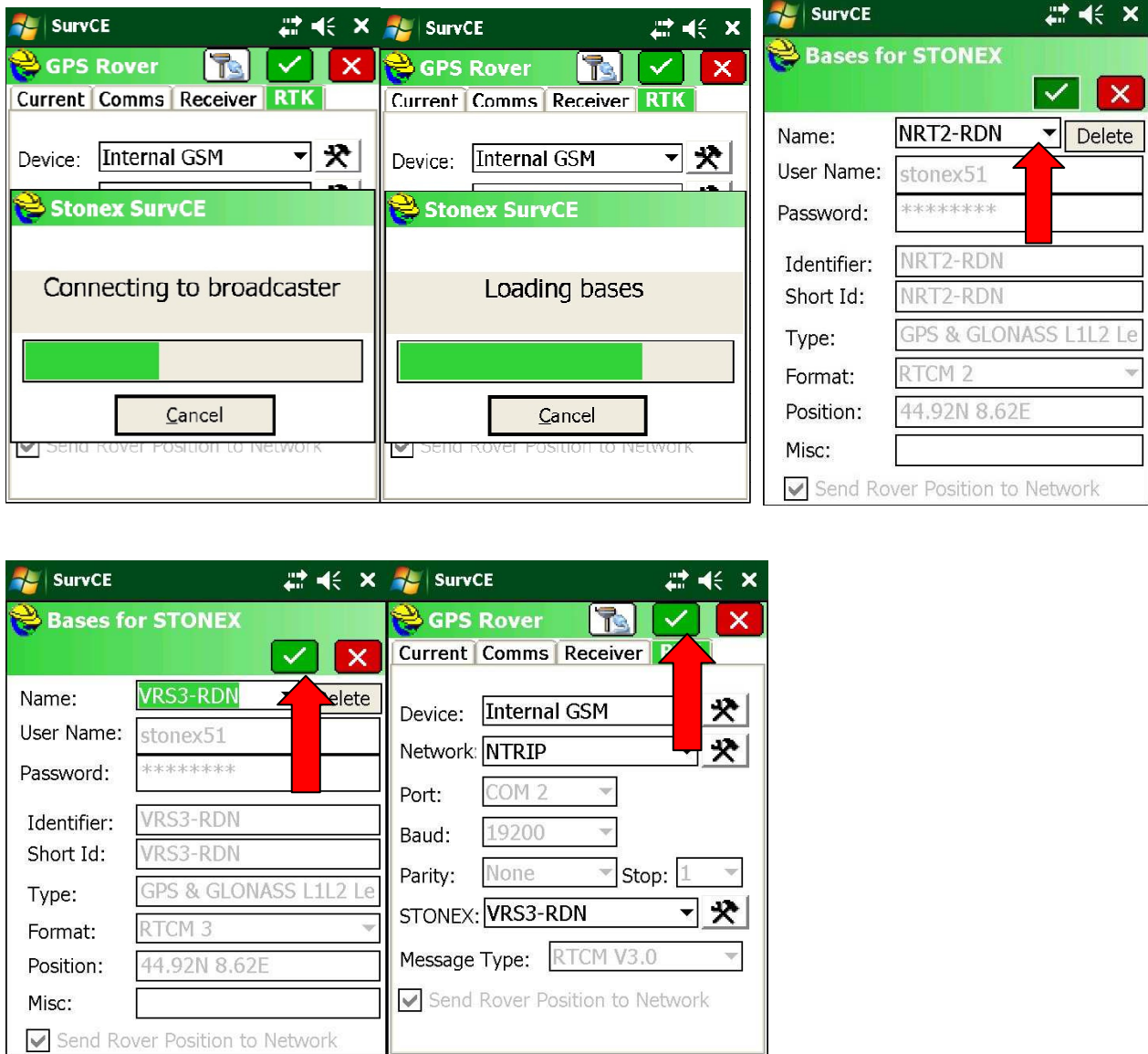
Operator:

Position 0.00S 0.00W ,

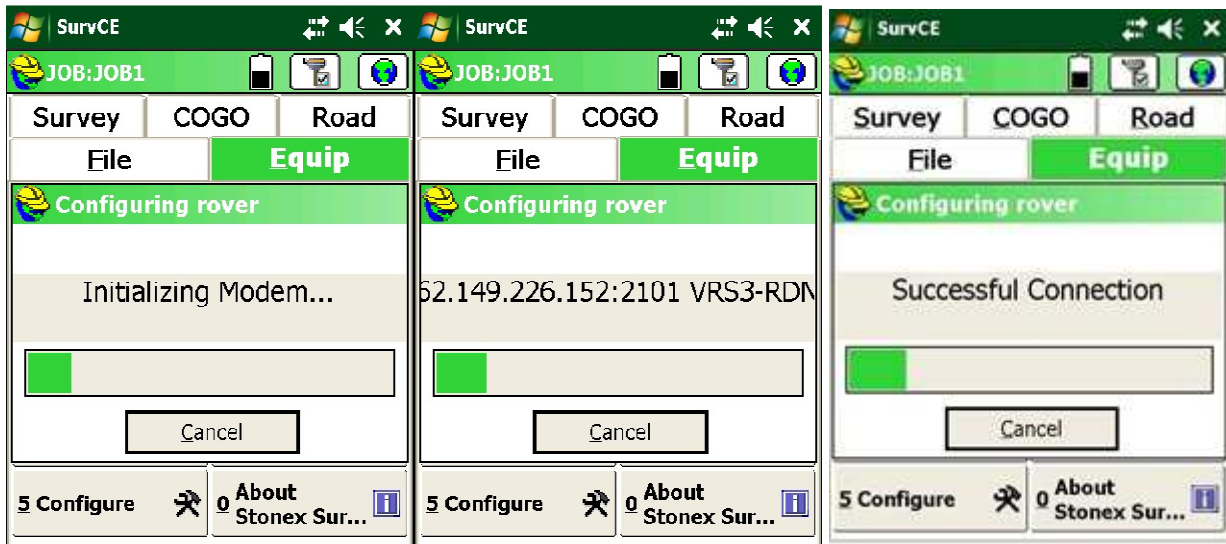
Misc:

NMEA: Rover position not needed.

Then the internet connection will start, you will see the message "Connection to broadcaster" and wait for the connection, then the available services for corrections (NRT, VRS, FKP, etc..) will be downloaded to your handheld: select the desired service and confirm.

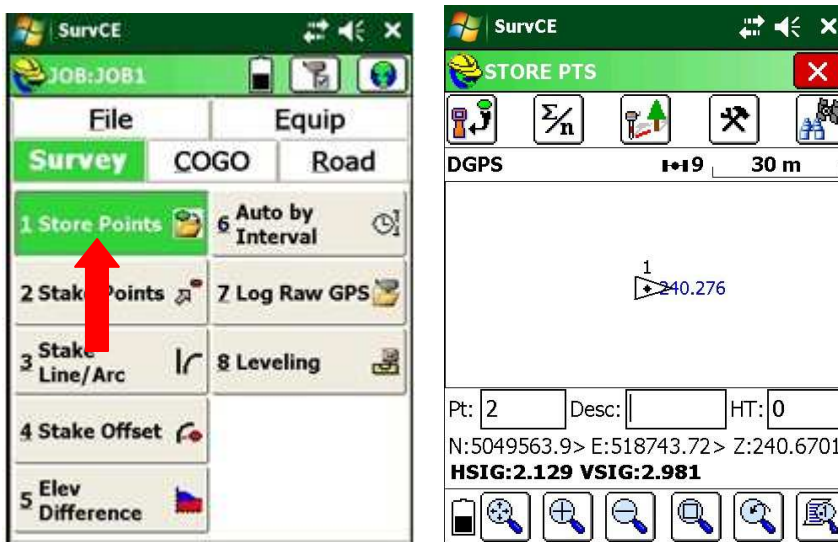


Now SurvCE will set the internal modem to realize the dialing to the Network Provider.



6. Check of the effectiveness of corrections

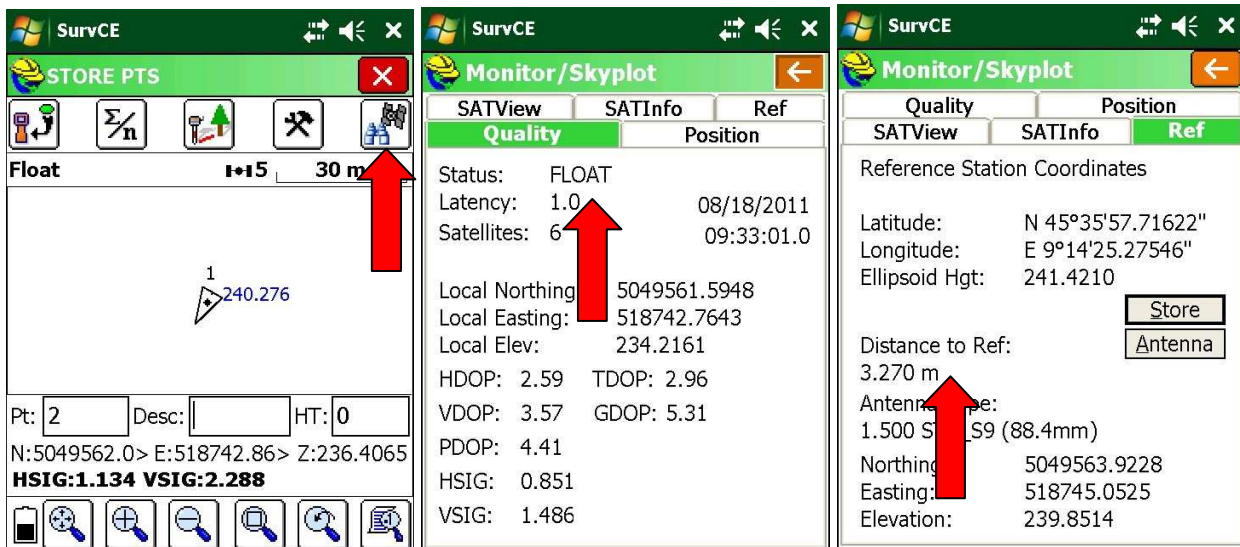
After seeing the message "Successful Connection", after a few seconds, from the menu Survey → Store Points, you can verify the correct connection to the RTK differential correction service, by checking the coordinates (N, E, Z), the number of satellites used, the status of the correction (DGPS, FLOAT or FIXED), the estimated accuracy (HSIG, VSIG).



By clicking on the icon at the right top angle of the screen (that with a satellite and a binocular inside), you can access to the "Quality" menu, where you can see if you are getting a correction (in our case it is a FLOAT state correction, with 1 sec of latency and 6 satellites used).

Moving to the menu "Ref", you can see the data regarding the reference station used

by our Rover, in this case it is a virtual base (service VRS) created at a distance of 3,270 meters.



The image displays three screenshots of the SurvCE software interface, illustrating the setup for a virtual base (VRS) service. Red arrows highlight the distance to the reference station (3.270 m) in each view.

STORE PTS View: Shows a point labeled '1' with a distance of 240.276 m. The status is 'Float' and the distance to the reference station is 30 m.

Monitor/Skyplot (Quality) View: Displays the following data:

Quality		Position	
Status:	FLOAT		
Latency:	1.0	08/18/2011	
Satellites:	6	09:33:01.0	
Local Northing:	5049561.5948		
Local Easting:	518742.7643		
Local Elev:	234.2161		
HDOP:	2.59	TDOP:	2.96
VDOP:	3.57	GDOP:	5.31
PDOP:	4.41		
HSIG:	0.851		
VSIG:	1.486		

Monitor/Skyplot (Position) View: Displays the following data:

Quality		Position	
Reference Station Coordinates			
Latitude:	N 45°35'57.71622"		
Longitude:	E 9°14'25.27546"		
Ellipsoid Hgt:	241.4210		
Distance to Ref:	3.270 m		
Antenna Type:	1.500 S (88.4mm)		
Northing:	5049563.9228		
Easting:	518745.0525		
Elevation:	239.8514		

For any problem, please contact our local agent or write an e- mail to support@stonex.it.

