

INSTITUTO GEOGRÁFICO DO EXÉRCITO

1932 - 2007

**75** ANOS  
A SERVIR PORTUGAL

**SERVIR:**  
*The Portuguese Army CORS  
Network for RTK*



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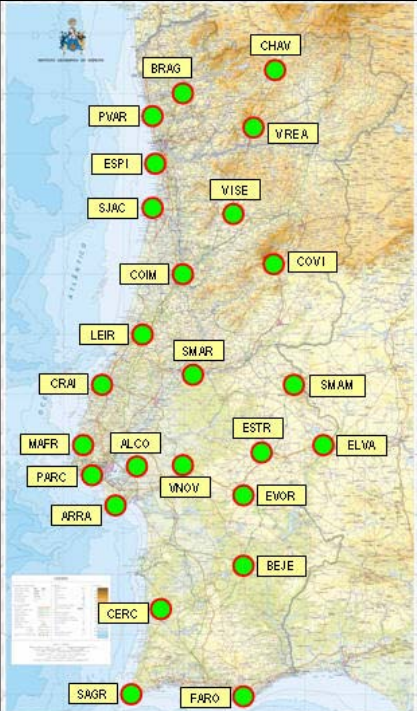
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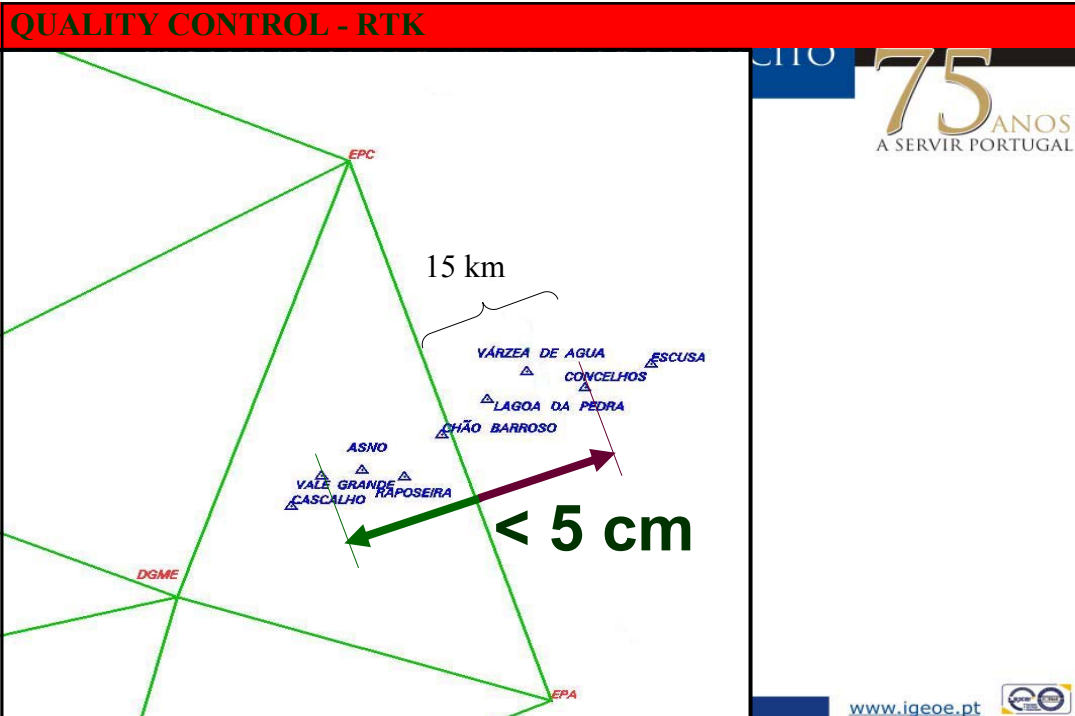
**SERVIR** network has presently 25  
GNSS Reference stations

Typically a reference station has the  
following components:

- GNSS antenna Trimble Zephyr Geodetic;
- Receiver Trimble Net R5
- Emergency power supply.



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### QUALITY CONTROL - DGPS

## DGPS – EGNOS vs. SERVIR



<u>Horizontal</u>	
<b>EGNOS:</b>	<b>2,30 m</b>
<b>SERVIR:</b>	<b>0,81 m</b>

<u>Vertical</u>	
<b>EGNOS:</b>	<b>1,09 m</b>
<b>SERVIR:</b>	<b>0,82 m</b>

- GeoExplorer XH
- 1'
- 1 Hz



**USERS**

**March 2008** - there are about 482 registered users either to RTK, DGPS or RINEX service

Months	Number of users	Number of connections	Number of connections by message format	
			RTCM 3.0	CMR+
October 2007	14	88	26	30
November 2007	17	115	39	37
December 2007	15	80	37	19
January 2008	17	189	146	15
February 2008	20	126	66	19
March 2008	31	131	72	52



**CONCLUSION**

To the IGeoE, the SERVIR network represents a great improvement in productivity (from an average of 8 points measured with the SBS RTK technique, it is now possible to measure 20 points per day) and reduction of the human effort.

