ROLE AND IMPORTANCE OF TUSAGA-AKTIF(CORS-Tr) IN CADASTRE
GENARAL DIRECTORATE OF LAND REGISTRY AND CADASTRE of TURKEY
TURKISH CIVIL CODE- ARTICLE 719

“If cadastral plans do not coincide with marks on the land, cadastral plan is essential”
So cadastral works need to be accurate ...

“GOOD COORDINATION BEGINS WITH GOOD COORDINATES ...”
Requirement;
To create a spatial infrastructure of cadastre by collecting coordinates in real time, in accurate and economic way...
Requirement;

However, in the past, getting accurate coordinates was taking long time, expensive and needed expertise.
Republic Of Turkey Ministry of Environment and Urbanisation
GENERAL DIRECTORATE of LAND REGISTRY and CADASTRE

TUSAG AKTİF
TÜRKİYE ULUSAL SABİT GNSS AĞI AKTİF

CORS-Tr
**Aim of the project;**

To determine **geographic location within 3-4 cm accuracy** for **24 hours** in real time (RTK) all across the country and Turkish Republic of North Cyprus (T.R.N.C.).

**Start-Ending Date** : May 2006 - July 2010  
**Project Budget** : 2,5 Million USD
CORS-Tr Stations-146 (T.R.N.C. included) ;

Distance between stations 80-100 Km.’s
CORS-Tr Stations;

- Erzurum Meteoroloji
- Siirt Meteoroloji
- Iğdır TKGM
- Kabinet
- Viranşehir Meteoroloji
CORS-Tr Control Center Ankara – GDLRC ;
Working Principle;

2005.0 Epok
Quality Checks

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Nr of POINTS</th>
<th>Mean Accuracy (m.)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>EAST</td>
<td>NORTH</td>
</tr>
<tr>
<td>2009</td>
<td>808</td>
<td>0.039</td>
</tr>
<tr>
<td>2014-2</td>
<td>723</td>
<td>0.045</td>
</tr>
<tr>
<td>2015-1</td>
<td>743</td>
<td>0.033</td>
</tr>
<tr>
<td>2015-2</td>
<td>701</td>
<td>0.029</td>
</tr>
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</table>

2 times QC Checks every year ...
User Web Service

http://www.tusaga-aktif.gov.tr
CORS-Tr Operating/Users;

Total # Users: 7460

01.04.2016

Daily total number of users (mean): 2000
Simultaneous maximum number of users: 770
CORS-Tr Usage Map – 2015;

13,362,191 points ...
CORS-Tr Usage Map for Cadastre – 2015;

1.422.867 points ...
CORS-Tr Project Gains;

- There is no need for establishing and measuring triangulation points and benchmarks which comprises 30% of mapping and cadastre works in terms of time and cost. Approximately 25 millions USD is saved from the allocated resources for cadastre which is approximately 75 millions USD in the year 2015.
Determination of velocity areas

Determination of tectonic movements
Studies on modelling atmosphere (ionosphere and troposphere) for the purpose of getting meteorological estimations and determining precipitable water vapour (PWV) were started at the General Directorate of State Meteorology and academic institutions.