

How a national mining agency is now able to manage applications for mining permits through an online form that can be completed in 20 minutes

Challenge: Making license application procedures easier, while monitoring mining operations nationwide



Executive Summary

The existing licenses, expired licenses, and unlicensed areas for the whole country can all be seen on a single screen .

As an agency of the Turkish government and a part of the Ministry of Energy and Natural Resources, MIGEM follows issues related to the licensing of mining operations, including analyzing and checking the applications for mining licenses.

MIGEM issued more than 84,000 licenses in 2013, compared to 10,000 in 2012



Solution

Since 2005, Başarsoft's web and desktop based GIS solutions have been developed and in use. Since 2012, a Kiosk Map application has been developed to make it easy for new applicants to apply for their first mining license. This application is used to apply for a mining permit and get the printout

- by entering coordinates
- by drawing and area

To evaluate the area of interest for logical and geographical problems

- Map sheet & coordinates are checked
- Orientation control (clockwise)
- Self intersection control
- Minimum/maximum applicable area control
- Area control for sea bed applications
- Free area control
- Steps are followed and reported

Results and Benefits

- Service quality is increased
- Productivity is increased
- Dynamic, up-to date, improved and adaptable data analysis
- Visual Analyses can be presented
- Data sharing between departments, ministries, private companies and the public
- Error free applications from the internet for citizens and companies
- 800% increase in applications

CASE STUDY



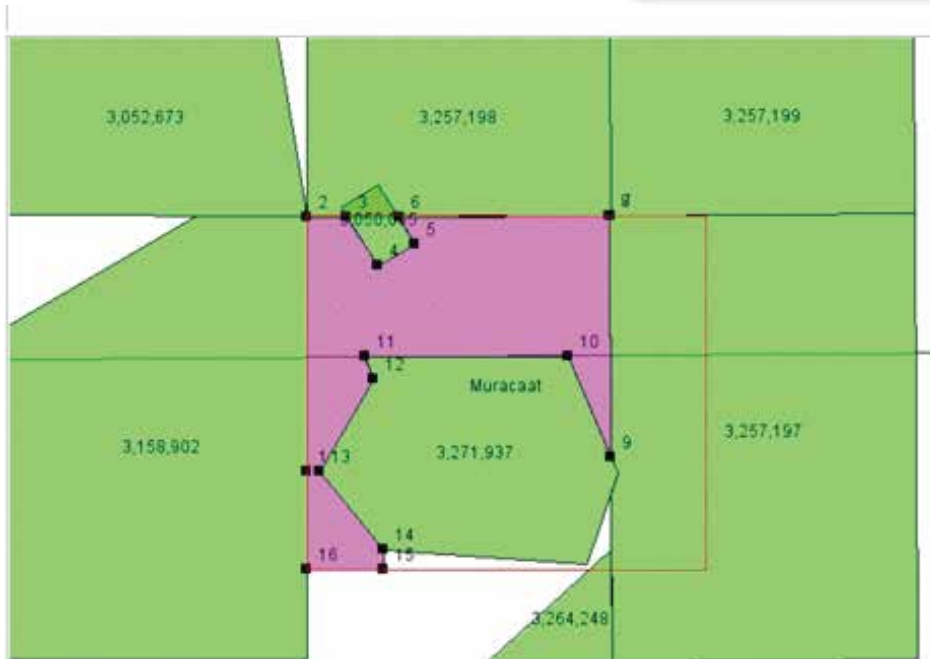
Technology Used

Oracle as Spatial Database.

MapInfo Professional is the leading Desktop GIS solution.

MapXtreme is the powerful web based GIS application software development kit (SDK).

MapXtreme is the leading software development kit (SDK) for integrating location intelligence with existing business systems. It allows developers to build custom mapping applications, provide tailored views of geographic data and automate and augment business processes.



When a new area is applied for (red rectangle), the previously licensed areas (green) and residual areas below a minimum width and area (white) are automatically removed. The remaining area (pink) is that which is available for licensing. The corner coordinates of this remaining polygon are enumerated and stored.