

Geodetic Base Survey and Management of Airborne Laser Scanning Survey

Client

ArcelorMittal Mining Sénégal, S.A.

Location / Date

Sénégal, May 2008

Background

In the second half of 2007 ArcelorMittal Mining Sénégal, SA (AMMS) has been granted concessions by the government of Sénégal to develop mining, transport and logistics activities of the Falémè iron ore project in the south east of Sénégal at the border to Mali. The main elements of the project are:

- Port concession, 20km²
- Railway line, existing 440km / planned 310km
- Mining concession, 1200km²

iMO's task was to manage an airborne laser scanning survey of the mining concession area and along the railway to generate a digital terrain model of the area.



Scope of Work

- Geodetic base survey
- Tendering of the airborne laser scanning work
- Permitting
- Logistics management
- GPS ground works during flight mission
- Data quality management & Data maintenance

Result

Geodetic base net, digital terrain model (1m resolution), ortophotos

Time Required

December 2007 – September 2008, airborne survey May 2008

Survey and Scanning Equipment

GPS: Leica 1200 series
Lidar: Optech ALTM 3100 LiDAR operated by Swissphoto AG,
Airplane: Pilatus Porter PC6 operated by Swissboogie