Hansa Luftbild – a reliable partner for the energy sector

OUR SERVICES FOR ENERGY PROVIDERS AND POWER GRID OPERATORS

TECHNOLOGY FOR GEODATA CAPTURE

Hansa Luftbild has access to aircraft, helicopters, unmanned airborne vehicles, large format digital cameras, laser scanners and other varied modern means of data capture systems. The number of data capture technologies available to the company has increased significantly in recent years, to the advantage of our clients. Data capture results and analyses can now be made available more swiftly and cost effectively than ever before.

HIGH-TECH - THE KEY TO QUALITY

Data can be captured off-shore, on-shore, in inaccessible areas, and independent of vegetation density with the deployment of aircraft and helicopters at cost-effective rates and with a swift turn-around. Energy providers and power grid operators will find the large range of services offered by Hansa Luftbild of particular interest.

- acquisition of aerial photos and production of digital orthophotos
- photogrammetric restitution
- airborne laser scanning of routes and large topographic areas
- detection of leaks in long-distance heating and gas pipelines
- detailed data capture using high resolution video imagery, e.g. cables on power masts or industrial sites
- analysis of roof surfaces to assess solar potential
- infrared cameras for thermographic analyses
- evaluation of vegetation to assess the impact of overhead cables on plant growth
- hyperspectral camera for monitoring vegetation, investigating / identifying geological characteristics
- bathymetric survey with laser scanning or echo sounding
- right data capture to assess light pollution
- oblique aerial photography with a multi camera system

Hansa Luftbild offers both consultancy and project management services. The company has extensive experience in project management, having operated in many countries, over many years. Our aircraft and/or data capture systems are also available for hire.

THE ADVANTAGES OF HANSA LUFTBILD PROVIDED SERVICES:

- All professional services from one source: flight survey, environmental services, software development and visualisation. As separate services or as a service package.
- The interrelationship between our precise data capture, environmental protection know-how and intelligent software solutions enables you to run transparent planning and business processes.
- Our extensive experience in international project management ensures successful outcomes even for the most demanding projects.
- Our airborne supported data capture and remote sensing technology facilitates flexible, precise and up-to-date geoinformation services. Such services provide you with cost efficient and high quality end-data.

UNSERE DIENSTLEISTUNGEN:

- Remote sensing & photogrammetry
- Geoinformation & planning
- Software consultancy services & software development
- International consultancy services & project management

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Energy providers and power grid operators will find great benefit in making use of the multi-faceted, professional services offered by Hansa Luftbild in the energy sector. Thanks to our extensive experience we can offer a wide range of branch specific services from data capture to the establishing of complex geo-data infrastructures, accompanied by efficient planning, business and monitoring processes. Our experts will work in close consultation with you to develop the best possible solutions for your needs.
Companies even in the most unaccessible of terrains, or in areas of dense vegetation, can be surveyed with appropriate technology. Our extensive experience in data capture and processing along with the utilisation of high performance remote sensing devices guarantees your receiving precisely surveyed objects. Object position and detail will be established precisely and accurately, even in the most inaccessible of terrains, or in areas of dense vegetation. Finally your database will be populated with high resolution orthophotos and oblique imagery, acquired with medium format cameras and sensor systems produced with photogrammetric methods.

ENVIRONMENTALLY FRIENDLY CORRIDOR MANAGEMENT AND ANALYSIS OF ENVIRONMENTAL THREATS
We offer a wide range of services tailored to the requirements of energy providers and power grid operators. In addition to traditional services required for planning approval and licensing, we also offer services which focus on planning for the care and maintenance of the natural environment in corridors and on properties. Thus your facilities will accord with the growing demands of the legislators and be met with approval amongst the general public.

LANDSCAPE PLANNING SERVICES
We can support you in your planning and approval processes with a wide range of services in landscape planning. These services include:
- environmental impact studies and assessments and accompanying landscape conservation plans
- technical papers on legal aspects of species protection and related detailed mapping
- implementation plans and supervision in environmental aspects of construction

In this day and age planning and approval are no longer the only concern in the construction of power grids and of corridors. Legislative and the general public now requires the development and operation of widening grids be environmentally friendly, that the determining of new locations for wind farms take into account environmental protection factors and landscape appearance issues, and that all these matters are dealt with in a completely transparent manner.

QUANTITY AND QUALITY
Our extensive experience in data capture and processing along with the utilisation of high performance remote sensing devices guarantees your receiving precisely surveyed objects. Object position and detail will be established precisely and accurately, even in the most inaccessible of terrains, or in areas of dense vegetation. Finally your database will be populated with high resolution orthophotos and oblique imagery, acquired with medium format cameras and sensor systems produced with photogrammetric methods.

EFFICIENT AND RELIABLE MONITORING
We can deliver all route relevant information and details required for surveying, e.g. through the capture of overhead/underground objects. Such detail includes capture of pylons and portal pylons as well as accurate data on the course of lines, on cross arms and line sag. Our surveys for changes in topography, including arms and line sag. Our surveys for changes in topography, including arms and line sag, can help you to ensure the long-term functionality of your power grid. We also support you in the management of corridors, by analysing obstructions and potentially dangerous objects and by calculating the proximity of vegetation and buildings to a corridor.

AIRBORNE LASER SCANNING FOR NETWORK PLANNING, RERTURING AND MONITORING
Airborne laser scanning (ALS) is a key technology for the documentation of resources and the planning of short and long distance networks, for delivering power, oil, and district heating services. We deliver precise and accurate data for planning, rerouting and corridor management. These services are fast, cost efficient and don’t require time intensive terrestrial survey. You can profit from the feasibility of ALS surveys both offshores and onshores.

GIS, WebGIS, server based geo-data portal)

The sources and amounts of data available have increased ex-ponentially in recent times. In addition to the classical geoda-tes of CAD and geoinformation systems less structured forms such as text, images and videos also have to be dealt with. Businesses are faced with the challenge of analyzing, processing and archiving such data and making it accessible to an ever growing number of internal and external users. We have expertise in the conceptualisation, implementation and management of medium-sized, large and very large (10-100 mil-lion geodatas) geodatabases. We are the Gold Level-part-ner with Oracle and according to need and size can implement either an Oracle spatial database or the open source PostGIS.

INDIVIDUAL SOFTWARE DEVELOPMENT
The energy sector is a dynamic business which requires soft-ware services providers who can deliver results in accordance with this fast-paced market. Our software developers and data base specialists are highly flexible. We can develop individu-al solutions tailored to your needs on the basis of well-known products such as Oracle, Geodeso or free open source software such as GeoGen-er, PostGIS, and GeoGEO. So you can be assured of a system which exactly meets your requirements and which can be seamless-ly integrated into your IT, environmental and business processes.

WEBSIS AS AN INFORMATION PORTAL
Browser based WebGIS portals are currently the instrument of choice for administering spatial information and making it avail-able to a wide variety of users. Thanks to intuitive user inter-faces less experienced users of geodatas can straightforword-ly access specialist information. GIS portals have the advantage of bringing together an extensive array of data allowing users to access, analyse and view in one environment information from widely dispersed sources. We have developed WEBSIS portals for a wide variety of customers, worldwide. Take advantage of our experience and expertise in this field. Thanks to our know-how in geodata management and our expertise in tailoring individual solutions we are the right partner for customers seeking scalable, low-maintenance solutions.

HANSA LUTTFILD – YOUR RELIABLE PARTNER FOR THE ENERGY SECTOR
The revolution that has taken place in the energy sector in recent years has complete-ly transformed the business and its demands. An extensive variety of large databases and datasets needed to be made available in clear and structured form for the business processes of planning, future projections and decision making. Our software develop-ers are specialists in the smart and efficient integration of geoinformation with business processes.

WEBSIS represents a solution for all geodatas.

Birds eye view representation on the basis of airborne registrations.

Trees in vicinity of a power line route

Windings in northern Germany
HANSALFURT--YOUR RELIABLE PARTNER FOR THE ENERGY SECTOR

Companies in the energy sector face many challenges owing to the growing demand for renewable energy sources and planned extensions of power grid systems - especially in the high-industrialised countries. We offer a wide range of branch specific services: base data for establishing suitable sites, support in route and network planning and the construction of smart geodata infrastructures for the efficient management of energy supplies.

AIRBORNE LASER SCANNING FOR NETWORK PLANNING, RERTOUD AND MONITORING

Attoimage laser scanning (ALS) is a key technology for the documentation of resources and the planning of short and long distance networks for delivering power, oil and water heating services. We deliver precise and accurate data for planning, remapping and corridor management. These services are fast, cost efficient and don’t require time intensive terrestrial survey. You can profit from the feasibility of ALS surveys both in nighttime and daylight.

QUALITY AND PRECISION

Our extensive experience in data capture and processing along with the utilisation of high performance remote sensing devices guarantee your survey project surveyed objects. Object position and detail will be established precisely and accurately, even in the most unaccessible of terrain, or in areas of dense vegetation. Finally your database will be populated with high resolution orthophotos and oblique imagery, acquired with medium format cameras and sector data produced with photogrammetric methods.

EFFICIENT AND RELIABLE MONITORING

We can deliver all route relevant information and details required for remapping e.g. through the capture of overhead transmission objects. Such detail includes capture of pylons and portal py- lons as well as accurate data on the course of lines, on cross arms and line sag. Our surveys for changes in topography, caused for example by subsidence, can help you to ensure the long-term functionality of your power grid. We can also support you in the management of corridors, by analysing obstructions and potentially dangerous objects and by calculating the proximity of vegetation and buildings to a corridor.

ENVIROMENTALLY FRIENDLY CORRIDOR MANAGEMENT AND ANALYSIS OF ENVIRONMENTAL THREATS

Our concept for the environmentally friendly corridor planning of corridors offers you a range of services with double benefits. You can implement an environmentally friendly plan for the care and maintenance of corridors offers you a range of services with double benefits. We can support you in your planning and approval processes and the implementing of processes for the measurement of results.

GEODATA MANAGEMENT, GEOINFORMATION SYSTEMS AND INDIVIDUAL SOFTWARE DEVELOPMENT

The revolution that has taken place in the energy sector in recent years has completely transformed the business and its demands. An extensive variety of large databases and datasets needed to be made available in clear and structured form for the business processes of planning, future projections and decision making. Our software developers are specialists in the smart and efficient integration of geoinformation with business processes.

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ENVIROMENTALLY FRIENDLY CORRIDOR MANAGEMENT AND ANALYSIS OF ENVIRONMENTAL THREATS
We offer a wide range of services tailored to the requirements of energy providers and power grid operators. In addition to traditional services required for planning approval and licensing, we also offer services which focus on planning for the care and maintenance of the natural environment in corridors and on properties. Thus your facilities will accord with the growing demands of the legislators and be met with approval amongst the general public.

LANDSCAPE PLANNING SERVICES
We can support you in your planning and approval processes with a wide range of services in landscape planning. These services include:
- environmental impact studies and assessments and accompanying landscape conservation plans
- technical papers on legal aspects of species protection and related detailed mapping
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In this day and age planning and approval are no longer the only concern in the construction of power grids and of corridors. Legislators and the general public are increasingly concerned with the location and operation of wiring grids by environmentally friendly, that the determination of new locations for wind farms takes into account environmental protection factors and landscape appearance issues, and that all these matters are dealt with in a completely transparent manner.

EFFICIENT AND RELIABLE MONITORING
We can deliver all route relevant information and data required for route planning – through the capture of overhead/underground objects. Such detailed capture includes capture of pylons and portal pylons as well as accurate data on the course of lines, on cross arms and line stop. Our surveys for changes in topography, caused for example by subsidence, can help to ensure the long-term functionality of your power grid. We can also support you in the management of corridors, by analysing obstructions and potentially dangerous objects and by calculating the proximity of vegetation and buildings to a corridor.

ENVIRONMENTAL LY FRIENDLY CORRIDOR MANAGEMENT
Our concept for the environmentally friendly management of corridors offers you a range of services with double benefits. You can implement an environmentally friendly plan for the care, monitoring and conceptualisation of your compensatory mitigation at a corridor (i.e. planting of trees along the course of lines, on cross arms and line stop). So you can be assured that the potential dangers and for assuring ongoing safety in your operations
- monitoring of adjustment and replacement measures, planning and conceptualisation of your compulsory mitigation and the implementing of processes for the measurement of results.
- visualisation of and access to all data (digital cartography, GIS, WebGIS, server based geo-data portal)

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Browser based WebGIS portals are currently the instrument of choice for administering spatial information and making it available to a wide variety of users. Thanks to intuitive user interfaces even inexperienced users of geodata can straightforwardly access the necessary data. We offer a wide variety of services which cover the entire spectrum from the design, implementation and technical support of webGIS portals for enterprise applications, large and small, to the implementation of geodata services.

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Trees in vicinity of a power line route
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Our services:

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