GEOINFORMATIONS KOMMENSIONAL STATES S

Cluster management and innovation consulting

Team Shaping the future together



Dr. Peter A. Hecker Chairman of the Board, CEO



Dr. Klaus Hildebrandt Managing Director, Network Manager



Isabelle Uhlig Assistant to the Management, Officemanager





Michael Lesch Network Manager



Dr. Silva Fischer Network Manager



Matthias Richter Network Manager



Jan-Henning Wedler Network Manager



Foreword

GEOkomm – Promoting Innovation.

GEOkomm provides innovation services for small and medium-sized enterprises of the geoinformation economy and represents their interests towards politics and society. Founded in 2002 as the association of the geoinformation industry Berlin-Brandenburg e.V., we have been promoting innovation networks comprising of actors from the realms of economy, science and administration. We cooperate nationwide with companies and research institutes to develop innovative products and services and help ideas along to reach the state of market maturity.

Geo-IT expertise from the capital region

Over the last 20 years geodata driven applications have found their ways into almost all courses of daily life. The main drivers of this development are the innovative technologies that companies in the geoinformation sector develop and bring to the market. The Federal Governments Commissioner for Information Technology estimates the market volume of the geoinformation economy in Germany to be in the amount of 40 billion euros per year. The knowledge region Berlin-Brandenburg is characterized by an excellent research environment and offers outstanding locational advantages for entrepreneurs. With approximately 2,000 companies operating here – the majority of which are SMEs - the capital region forms a particularly innovative cluster in the field of the geoinformation economy.

GEOkomm takes advantage of this dynamic environment and its long experience in managing innovation networks to support companies in research and development processes.







Management



Organization



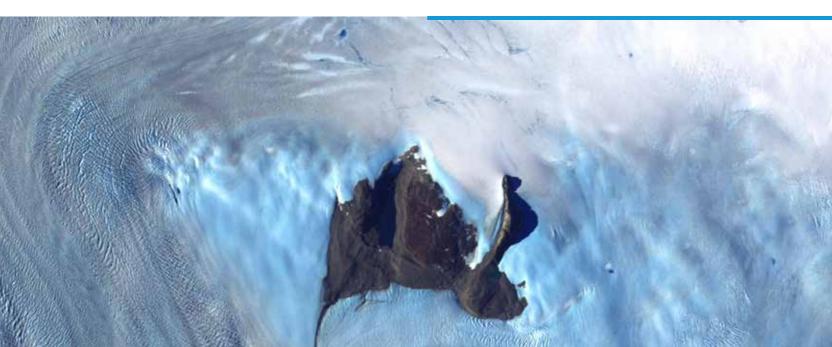
Networking



Knowledge transfer



Representation of interests



Services Tapping the full potential

We bring people, companies, know-how and ideas together and use the synergiesto advance economy and society. Our core activities are the management of innovation networksment, innovation and grant advisory, the initiation of networking platforms and organization of trade show appearences.

Network management

One of our most important concerns is to link the stakeholders of the geoinformation economy. We bring companies and research institutions together across industries, identify potential for cooperation and initiate corresponding networks with the goal of implementing joint R&D projects.

Grant and incentive advisory

Our consulting is based in our extensive experience in the field of funding. We asses market risks and opportunities, act as an incubator for innovations and link potential partners for the implementation of R&D projects.

Networking/Platforms

We organize various events on current topics and bring different stakeholders of the geoinformation economy together:

GEOkomm Technology Salon

In the fashion of Berlin salon culture of the early 20th century representatives from business, science, politics and administration discuss geoinformatics and space-related topics.

Association Members Annual General Meeting

For the duration of membership in a innovation network, all network partners are exempt from membership fees Members of the association GEOkomm e.V.

GEOkomm Networking & Innovation Summit

The summit gives insight into current trends, political decision-making and the future of the industry to gain a decisive competitive advantage.

GEOkomm Technology Brunch

Every second Friday at 11.00 a.m. one of our network partner presents new projects, products or services from their current field of activity.

Trade show appearances

We organize joint booth's at international fairs where our members can present themselves can present themselves:

INTERGEO, changing locations

Congress and Trade Fair for Geodesy, Geoinformation and Land Management

digitalBAU, Cologne

World's leading trade fair for architecture, materials and systems

INNOTRANS, Berlin

International trade fair for transport technology -Innovative components, vehicles, systems

AGRITECHNICA, Hannover

Showcase of the global agricultural machinery industry and Forum for future issues in crop production

NEW ENERGY WORLD, Leipzig

Conference and exhibition for energy management, services and networked systems

DMEA

Trade fair for the health IT industry

MEDICA

Trade fair in Düsseldorf, world forum for medicine with international trade fair and congress

Focusing on networking

We link topics and stakeholders, keep an eye on the market and our nose in the wind, in order to help companies advance and promote innovations.

112

- Mega trends and technologies
 Digitalization, decarbonization, decentralization,
 <u>Electrification</u>, Networking ...
- Industry analysis, geoinformation economy and industry networking

Industry data and development, networking with other industries ...

- Market focus products services tasks
 Market definition, product selection, service definition,
 Task packages, competitive position ...
- Focus on R&D consulting and program support Identification, conception and implementation

ZIM – Cooperation Network DigiShip



Digitization and application of Geodata in Inland Navigation

Shipping volume in Germany is predicted to grow significantly until the year 2030. It is estimated the shipping volume in freight traffic will increase by about one third. While other modes of transport are already reaching the limits of their capacity, waterways and in particular inland waterways still have considerable scope for expansion.

In Germany inland waterway transport plays – alongside road transport –an important role in Germany in particular. Against this backdrop, inland waterway transport is not only a reliable and flexible transport system, but also remains by far the most environmentally friendly mode of transport with major advantages in the transport of hazardous goods. The share of sport and leisure shipping is also constantly increasing, whichhighlights the need for operational use of traffic management systems and individual navigation assistants. The basic prerequisites for functioning inland navigation are efficient infrastructure, environmentally friendly and modern ships, and appropriate integration into multimodal logistics chains. The network aims at promoting the development of digital technologies and to strengthen the network stability of the entire waterway system in inland navigation. This includes comprehensive linkage, innovative digital concepts and business models, and the development of digital platforms which are linking different stakeholders and modes of transportation.

Improved transport management systems

- Further development of evaluation methods in Real-time
- New processes in the field of automated and connected driving
- River Information Services (RIS)
- Further development of information retrieval systems (Big Data) + Machine Learning
- Use of mobile networked information and assistance systems in the water sports sector
- Further development of interfaces



Advertorial



VEINLAND GmbH is an innovative company in the field of development and production of hardware and software for special industrial and maritime applications. Our spectrum ranges from printed circuit board design to hardware development and graphic surface design. Much is developed and manufactured in-house with a high degree of vertical integration. Our company is certified according to ISO 9001:2015.

Linchpin of our development and production is a small town in Brandenburg. This is where VEINLAND GmbH was founded in 2006 by Dipl.-Ing. Gerald Rynkowski. By sponsoring local associations and institutions, we demonstrate our regional ties to our location "Seddiner See". Promoting young talent and strengthening the Brandenburg region as a business and science location is just as important to us. We have been sponsoring Germany Scholarships for talented young students every year since 2012.

Our products are developed and solidly constructed for longterm use. Before they go into series production, they are exposed to vibrations and climatic fluctuations in external laboratories. We have already equipped countless ships worldwide with our products and systems. Our product range includes: Ship performance monitoring systems, BNWAS, NMEA interfaces, DCU, UPS, PCI devices, inclinometers, sonar systems, wind and weather systems.

In the area of network technology, we offer advice and solutions for cybersecurity. Our PIM-OBU system for recording ship operating data helps to reduce CO2 and operators to meet legal requirements and thus strengthen their sustainability. Our industrial solutions are used in the fields of electrical engineering, industrial electronics, sensor technology, logistics, medicine, IT software and hardware systems.

Here we develop and manufacture small controls for liquids, voice memories & output systems, modules for industrial computer systems such as cPCI, UART and cPCI Serial, take on CNC milling work for front and rear walls, cable assembly, module and control cabinet construction as well as product development.

In addition to standardized solutions, we also support our customers in the development phase of their products. This is what makes many customer innovations possible in the first place.



VEINLAND ONE SOURCE > MULTIPLE SOLUTIONS

Ship Performance

Cyber Security

KVM-Lösungen mit bis zu 4k Auflösung

USV für ECDIS Installation

NMEA Schnittstellen



VerDiGes – ZIM cooperation network

Health –digital and smart



Telemedicine services, mHealth, eHealth, electronic patient records, electronically supported disease and knowledge management - in the field of health, there are many digital areas that demonstrate technical developments and offer great opportunities. Nevertheless, the German healthcare system is still stuck in isolated solutions.

The technological innovation pressure on the healthcare industry is enormous. The standards of the future are being set, but technological implementation is not keeping pace with expectation. In order to implement digital-based care solutions in a wide-ranging, user-centric and purpose-oriented environment, solutions are needed that go beyond the current state of innovation. VerDiGes contributes to the integration of intelligent, technological digitalization solutions into the various subsystems of a holistic health care system.

The network is focused on solutions "Made in Germany" and helps not only on the user side, but also on the engineering-based, to strengthen Germany as a business location.

The following questions are addressed in VerDiGes in order to achieve e-health service innovations:

- How can dataand knowledge be comprehensively applied in a context-related manner?
- How can innovative technologies be used to build flexible infrastructures?
- How can digital solutions be integrated as seamlessly as possible in the user experience?



:00'

Objectives

 eHealth solutions that are developed in Germany and successfully established on the German market ("Made in Germany"). 111111

- Standardized, interoperational digital solutions that are seamlessly connected and interact smoothly.
- An integrated data loop that ensures data exchange and availability along the entire chain of treatment of a patient without restrictions.

VerDiGes provides incentives for the rapid developmentand marketable introduction of digital medical applications. The promotion of telemedical services and R&D collaborations are a particular focus.

ZIM – Cooperation Network agrASpace

Aerospace technologies for agriculture



In order to cope with the increasing pressure from global population growth and climate change, modern agriculture faces major challenges. According to the latest forecasts, agricultural production must double to ensure food security worldwide in 2050.

At the same time, greenhouse gas emissions must be reduced by two-thirds. Furthermore, there are high societal expectations regarding animal welfare and consumer protection. To achieve these goals in the longer term, agricultural processes must be fundamentally transformed, and the natural resources must be used sustainably. Digitization enables a new era with a great potential for innovation by optimized production processes, knowledge-based production and use of natural resources, taking into account multiple ecosystem services.

In addition, it becomes increasingly important to obtain information on agricultural land and its various parameters

with high temporal and spatial resolution of agricultural areas and their various parameters and to monitor them continuously. High potential is in geo- and remote sensing data for smart applications in the management of agricultural land. Within the network solutions are to be developed to increase production and thus ensure a supply in line with demand. The objectives of agrASpace are networking along the value chain and the involvement of all stakeholders by providing information, the valorization of ecosystem services based on the the needs and quality requirements of society, as well as the redesign of agricultural landscape structures.



Advertorial



A modern company with tradition: Hansa Luftbild was founded in 1923, making it the oldest photogrammetry company still in existence in the world. Today the Hansa Luftbild AG is a modern service provider, which offers solutions around the topics of Geo Consulting, Project Management, Aerial Surveys, Mobile Mapping, Geo Information, Photogrammetry and Geo Software Services.

The Hansa Luftbild references reach into about 130 countries on all continents and include many customers from the public administration, industry, real estate and cadastre administration, development aid, the service sector, transport and traffic, supply and disposal as well as agriculture and waste management, and agriculture and forestry.

Geo Consulting & Project Management

From consulting on the implementation of geo information processes, training, and the management of international projects: The tasks we are confronted with range from international imagery flights, laser flights the creation of digital orthophotos, international cadastral systems and cadastral systems to IT technologies for land administration.

Aerial Surveys

The beginnings of Hansa Luftbild were in aerial photography and photogrammetric analysis. Until today the airborne collection of geo-data by means of aerial photography and laser scanning by airplane and helicopter, as well as the the creation of digital orthophotos is a main pillar of the company. Further services are thermal flights, hyperspectral flights and charter flights.

Mobile Mapping

Hansa Luftbild has long since ceased to be the sole provider of airborne of geo-data from the air. Geo-data are also collected by means of the most modern sensor technology and are and visualized in state-of-the-art technologies. Examples of applications are real estate, street furniture, road condition data or the collection of road inventory data.

Geo Information

Turning geo-data into usable information: The solutions range from specialized cadastres for public administration or management tools for the real estate industry and real estate management to wastewater fee splitting, landscape master plans or hazard mapsfor flooding scenarios.

Photogrammetry

The photogrammetric evaluation services include 3D models from image and laser scan data, e.g. digital building and city models or digital surface and surface and terrain models.

Geo Software Services

Hansa Luftbild advises customers and develops individual software solutions for the integration of geo data into business processes. In addition, Hansa Luftbild develops software products "out of the box" such as its own WebGIS ExperMaps, the tree recording software ExperMaps Baum, or industry solutions such as Hansa GeoPort used by bremenports.



Transforming Geo Information into Solutions

State of the Art. Worldwide. Since 1923.

Geo Consulting
Project Management
Aerial Surveys
Mobile Mapping
Geo Information
Photogrammetry
Geo Software Services



ZIM – Cooperation Network twin4bim

Digital twins for spatial environments



The network focuses on the development of concepts, methods, technologies, and applications for the acquisition, structuring, management, analysis, and visualization of digital twins for spatial environments.

This includes their use for Building Information Modeling (BIM) in general, as well as construction monitoring, Industry 4.0-compliant linkage to industrial prefabrication and facility management in particular.

The digital twin is an essential element of an overall concept for accelerating, improving quality, and optimizing costs in the construction industry and cost optimization in construction. Ancillary areas such as cleaning services, for example, benefit by improving execution quality and control capability. The focus of the network's work is therefore on novel technologies and processes for efficient, cost-effective, and coordinated, largely automated collection, processing, continuation, evaluation and provision of digital twins for spatial environments (such as streets, buildings, squares, infrastructure elements) based on 3D point clouds. For this purpose, processes, products, and services are to be developed and linked with each other in such a way that holistic processesand value chains can be developed.



The focus of projects planned so far:

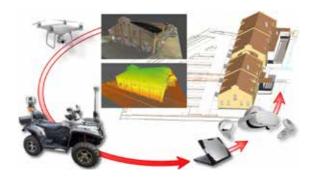
- Machine learning for automated point cloud interpretation
- Extraction of high quality IFC data from historical material of arbitrary origin
- Combination of Big Data and Machine-Learning
- ▶ Real-time evaluation
- ▶ Reduktion von Redundanz in Punktwolken
- Selbstlokalisierung von mobilen Endgeräten
- Monitoring und Simulation
- Akustikdaten in IFC für BIM
- Nutzerrollenausprägung in Hardware und Bedienoberfläche
- ►M2M BIM



Schweißtechnik
 Engineering
 Service Druckhalteanlagen

Advertorial

Future-oriented GEO-solutions from the capital region Berlin-Brandenburg. With their educational platform Geobusters, the companies Geo-Office GmbH and IVB Krause + Partner from Falkensee are well known as Terra Science Network.



Surveying activities around topics like land parcels, building processes and valuation are the main focuses of the company IVB Krause + Partner. From BIM-compliant engineering surveying, as-built documentations, evidence preservation procedures, real estate valuation & land acquisition, CAD & 3D visualization, geodata management & geodata integration to customized extended reality experiences, the company is active in the capital region and beyond.

Geo-Office, as a scientific-technical sister and service company, has dedicated itself entirely to geographic information as the most significant ressources of the 21st century. Part of the corporate philosophy is that almost every industry needs uncomplicated and sustainable access to geographic information. The three pillars of the company: Geoservices, research and consulting offer customers the advantage of a central contact for all geodetic matters. Geodetic solutions and products should be available and easy to use for everyone.

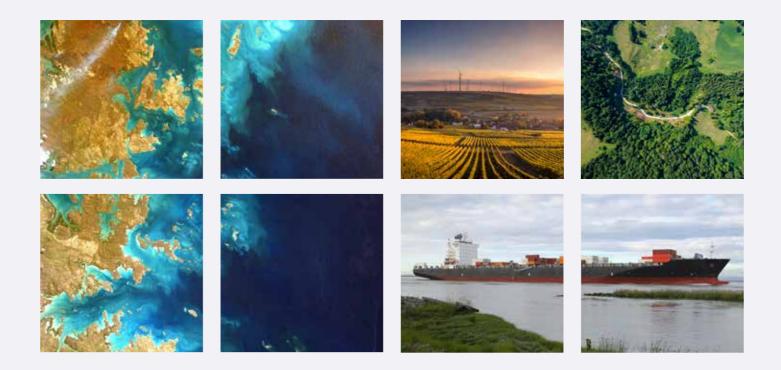
With Geobusters, both companies face their social responsibility, from supporting digital participation for educational institutions to recruiting and qualifying young talents to researching and developing innovative geodetic methods, solutions and services. Terra Science Network: Reliable partner for digitization and geospatial information at your side.



20 years of GEOkomm

Bundling Competencies. Securing growth.

The Association of the GeoInformation Industry Berlin/Brandenburg GEOkomm was founded in November 2002. Small and medium-sized enterprises as well as internationally operating large enterprises of the industry are united, networked and represented in our association.

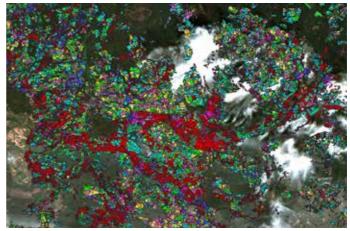


The profile is completed by research institutions of geosciences and geoinformatics as well as representatives from state authorities, trade associations and other players who are committed to promoting a flourishing geoinformation market in the long term.

The importance of geospatial information for improving business processes and decisions is undisputed and has increased enormously in the last 20 years. Today, the products and services of this industry are used in almost all areas of daily life. The capital region of Berlin/ Brandenburg offers outstanding locational advantages for entrepreneurial activities due to its excellent research environment and has developed into an innovative cluster in this sector. The geo-information industry is the engine of digitization – the aim of this initiative is to focus on the importance of this sector, support and leverage its innovation potential is our concern and mission. To this end, we have institutionally strengthened the association's networking activities in recent years and developed organizational differentiations for individual tasks. The geo-information industry has become a key sector for technical, economic, and social development. Securing its growth by bundling competencies is a task of future-oriented importance – also in the next 20 years.

Advertorial





Using artificial intelligence to predict commodity market prices - that's the mission of Agripreis, an Al data analytics company with an international team. The goal is to optimize the marketing process of commodities on the market and thus to optimize the timing of trading decisions.

To this end, the company has developed its own technology, based on artificial intelligence (AI) in the form of a complex machine learning framework which aggregated models and neural networks to perform time series to perform a time series analysis of global data sets. The included data includes millions of influencing factors (e.g., historical data, USDA reports, weather data, import and export rates, macroeconomic data) to market analysis and thus to make the most accurate forecasts on a regional and international level as well as future market developments of raw materials. to be able to derive. The company is also researching the future inclusion of satellite data as a further component of the component in the AI system to expand the forecasting capability forecasting capabilities, to increase validity and to be able to make to be able to make statements about crop volumes.

In cooperation with the German Aerospace Center (Deutsches Zentrum für Luft- und (DZLR) and other partners, the company is looking for ways to realize this project in a timely manner. realize this project. The satellite images can ideally detect changes in vegetation. The evaluation and use of satellite-based data in conjunction with geodata (such as soil and location data, weather, and climate data) is then aimed at producing the most accurate possible predictive models for crop yields as accurately as possible. The aim is to develop, test and implement solutions for more sustainable and resource-efficient processes in agriculture.n.

For more information on the technology and the product at www.agripreis.de

Mithilfe **Künstlicher Intelligenz** die Zukunft der Rohstoffpreise vorhersagen?





Cooperation with added value

- Representation of interests at the political level at the state and federal level as well as at the EU
- Communication and exchange as a basis for sustainable networking
- Implementation of joint stands at the important trade fairs of the industry
- Access to knowledge and technology transfer and to national and international joint projects
- Lecture and information events
- Discounts for members at events and courses

GEOkomm Verband der GeoInformationswirtschaft Berlin-Brandenburg e.V. Hans-Thoma-Straße 4 14467 Potsdam

Fon: +49 (0) 331 273 19 23 Fax: +49 (0) 331 273 19 35 info@geokomm.de www.geokomm.de



Whether SME, large company, cientific institution, or association - as a member or partner of GEOkomm you benefit from the synergy effects of a strong community!

ZIM-sponsored networks







twin4bim







JS/DEUTSCHLAND • Concept: JS/MEDIA TOOLS A/S • 241490 • www.jsdeutschland.de