What is S.D.I.M?

A **geographic information system (GIS)** that integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. Geography plays a role in nearly every decision we make. Choosing sites, targeting market segments, planning distribution networks, responding to emergencies, or redrawing boundaries.

GIS allows us to view, understand, query, question, interpret, and visualize data in the form of maps, globes, reports, and charts. A GIS helps you answer questions and solve problems by looking at your data in a way that is quickly understood and easily shared. GIS technology can be integrated into any enterprise information system framework.



THREE VIEWS OF A GIS

1 | THE DATABASE VIEW:

A GIS is a unique kind of database of the worlds geographic database (Geodatabase). It is an "Information System for Geography." Fundamentally, a GIS is based on a structured database that describes the world in geographic terms"

2 | THE MAP VIEW:

A GIS is a set of intelligent maps and other views that show features and feature relationships on the earth's surface. Maps of the underlying geographic information can be constructed and used as "windows into the database" to support queries, analysis, and editing of the

3 | THE MODEL VIEW:

A GIS is a set of information transformation tools that derive new geographic datasets from existing datasets. These geo processing functions take information from existing data sets, apply analytic functions, and write results into new derived datasets. All these datasets should be stored in a database. Together, these three views are critical parts of an intelligent GIS and are used at varying levels in all GIS applications.

Why Use GIS?

Organizing a Major Event requires many location-based processes and data is stored in a variety of formats in many locations. These data have to be integrated so that they can be analyzed as a whole to make critical planning decisions.

GIS can integrate and relate any data with spatial components regardless of the source of the data. The functionality of a GIS enables to create a "virtual geographic world" and to run simulations for many different thematic questions and regions. In combination with non-geographic applications and calculation programs this can save tremendous time and money.

www.masterconcept.at www.masterconcept.at

S.D.I.M Pyramid

MASTER PLANNING AND CONSULTING

International multi-disciplinary Master Planning and Professional Consulting with special focus on Geographic Data based solutions.

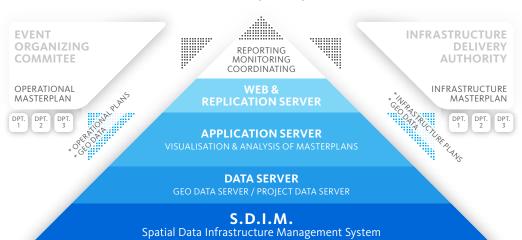
Philosophy

Masterconcept offers userfriendly Geo Data based Planning- and Management solutions for Major Sports projects of large scale and streamline all procedures

We process, collect and manage multi-stakeholder resulting in maximum efficiency.

Customized maps, web based project solutions and a well managed project data base as the key to your

GOVERNMENT / CITY / REGION



Partners & Clients

www.smc-ltd.eu

ROS Engineering

www.roing.ru

Roza Khutor LLC

www.rozaski.com

University of Technology Vienna

Institute for Transport Planning and Traffic Engineering www.tu-wien.ac.at

Federal Ministry of Agriculture, Forestry, **Environment and Water Management** www.lebensministerium.at

Austrian Railway Corporation

www.oebb.at/bau

bcn eventfacory

www.bcneventfactory.com

Doppelmayr AG

MS GIS

www.msgis.com

Sochi 2014 Organizing Committee www.sochi2014.com

SynerGIS / ESRI distributer www.synergis.at

TechnoProm

www.ik-technoprom.ru

Contact

Masterconcept Consulting Ltd

Head Office:

Ganshofstr. 18a / 5020 Salzburg / Austria

Technical Office

Pfeifergasse 6-2 / 5020 Salzburg / Austria

GIS / SDIM Office

Mariahilferstrasse 119-4 / 1060 Wien

m: +43 699 190 834 46 / f: +43 662 83 13 69

office@masterconcept.at / www.masterconcept.at





CORE COMPETENCE GIS | S.D.I.M.

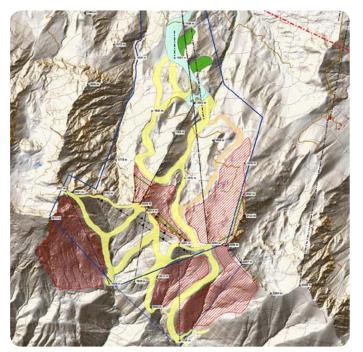
www.masterconcept.at/GIS



Infrastructure Management



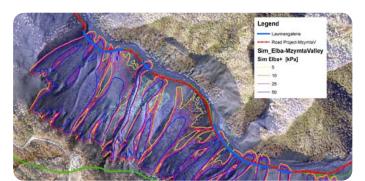
Web solution for GIS based Urban Master Planning



Mountain Master Planning, Slope Planning and Avalanche Zoning

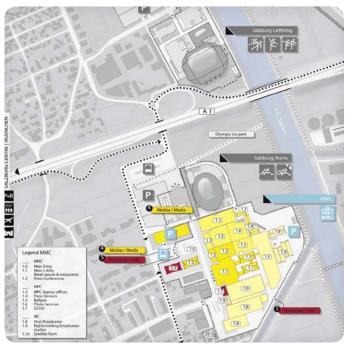


Digital Cadastre Plans combined with Venue Plans



Avalanche Simulation Modelling based on Digital Elevation Models

Major Event Solutions



Major Event Venue Cluster Planning in Urban Contex



enue Master Planning in combination with environmentally sensitive zones



GIS based city sports infrastructure management (Ski Jumping Innsbruck)



GIS based city sports infrastructure management (Football stadium, Hockey Stadium Cluster)

GIS GEOGRAPHIC INFORMATION

SYSTEM

GIS BASED SERVICES FOR INTEGRATED INFRASTRUCTURE DEVELOPMENT

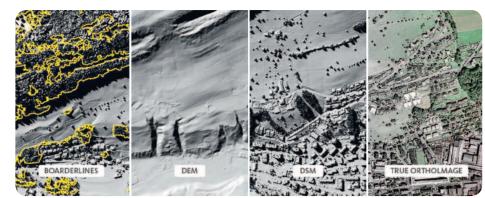
Masterconcept provides specialized consultancy services and solutions for the integrated planning, maintenance and management of major infrastructure projects.

We tailor tools and software solutions to specific client requirements in **Geographic Information Systems (GIS)**; combining all infrastructure projects into a geo-referenced database – **Spatial Data Infrastructure Management System (S.D.I.M.)** with environmental, demographic and/or administrative data.

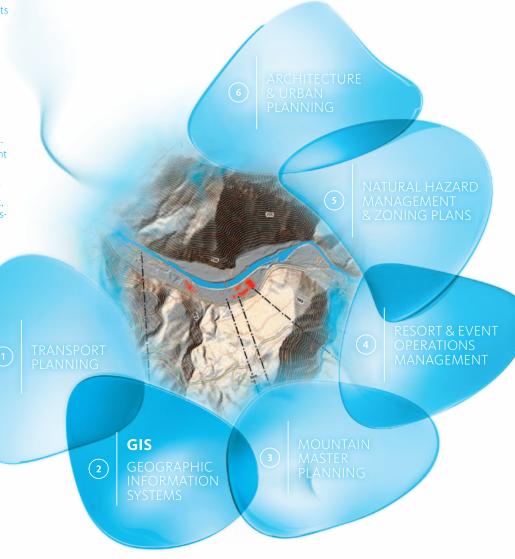
The resulting custom thematic information (plans and maps) referencing the same geographic data foundation can be used by different stakeholders (builders, infrastructure planners & operators, tourism associations, emergency services, public administration ...) to model simulations and calculations as well as to evaluate land owner management and environmental zoning criteria.

Masterconcept also conducts traffic simulations of multi-modal passenger flows in a **GIS** environment, in order to review the design and feasibility of transport infrastructure.

S.D.I.M. allows us to easily manage and monitor the ongoing development of complex large scale regional projects.



Layer based structures of Geodata



Services

GIS

- * Data Capturing and Management
- * Data Integration
- * Data Analysis
- * Application Developement

MMP:

- * Natural Hazard Management
- * Avalanche simulations

* Flood Routing

- * Integrated Operations Planning
- * Coordination of complex projects

Architecture:

- * Project Developement
- * Conceptual Master Planning
- * Urban Design

TSM:

- * Transportation Simulation Modeling and reports
- * Strategic recommendations
- * Transport Infrastructural solutions and concepts

S.D.I.M.

SPATIAL DATA BASED INFRASTRUCTURE & MANAGEMENT SYSTEM

planning, viewing, controlling and monitoring tool based on Geographical Data & Project Data to be used by all stakeholders and responsible entities (Organizing Committees & Infrastructure Delivery Authorities)

BENEFITS OF THE S.D.I.M.

- * Common database for all stakeholders
 (Operations, infrastructure, legal, finance, ...)
- * Common project management, monitoring and controlling tool
- * Visualization of project progress for all stakeholders
- * Basis for strategic decisions (venues, environment, properties, transport,...)
- *Long term benefits for the Olympic / Event region (management, environment, tourism, public maintenance)
- * Transparency of project circumstances (geology, nature risks, local requirements)
- * Special tools for security, emergency and health care planning
- * Detailled overview on master plan, budget and timelines
- * E-learning for OC staff, volunteers and other stakeholder

BENIFICIARIES OF S.D.I.M.

- * Architects & Engineers (CAD)
- * Operational plans
- * Security plans
- * Budget plans
- * Transport models and spectator flow simulations
- * Accommodation data and integration into transport models
- * Land owner agreements and cadastre legal issues
- * Facility Management
- * Geographical Data Management (GDM)
- * Raw material and labour force procurement (transport & logistics support)