“Extended use of 3D City Models in cloud based platform”

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3D in strong growth

- 3D becoming a commodity
- CAD and GIS converging
- Standards
- Rapid technology development
- National 3D projects
Challenging questions

• Are the investments in 3D data viable?

• Can the value of 3D be further exploited?

• What are end user applications?

• How will online application impact use?
Opportunities with 3D online

- Simplify access to data and tools
- Instant availability of latest data
- Handle large data sets
- Web features and paradigm
- Integration in existing solutions
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3DMaps SDK
Developer Platform
Java/WebGL/Mobile

CityPlannerOnline
Planning Tools in the cloud
Leading online 3D visualisation solutions

Hamburg
Oslo kommune
Göteborgs Stad
Skellefteå kommun
Stockholms stad
STADT: SALZBURG
Silkeborg Kommune
Nacka kommun
Linköpings kommun
ALINGSÅS KOMMUN
StaDtWien
Berlin Partner
Svendborg Kommune
Kungälvs kommun
Avesta kommun
Norrköping

GEOPINFO
CARTESIA
ADDNODE GROUP
Slagboom en Peeters
SWEDESURVEY
AIRBUS DEFENCE & SPACE
terratec
virtualcitySYSTEMS
Mirukuru
gtut
COWI
CV
CITY VISION NETWORKS
BIONOVA consulting

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Choice of data

LOD1: Simplified volume buildings with flat roofs
LOD2: Volume buildings with roof details
LOD3: Buildings with facades textures
Textured Mesh/Digital Surface Model (DSM) eg StreetFactory, Smart3DCapture, PhotoScan
Framework for using and sharing

Public access and e-services

Internal access and tools

Admin
Staff

Department
Department
Department
Department
Department

Politicians
Stakeholders

Planners
Consultants
Architects
Demo
Visualisation in the cloud

- PhotoScan
  By Agisoft

- Smart3DCapture
  By Acute3D

- StreetFactory
  By AirBus Defence and Space

- CityGML

- ArcGIS

Customer Account

Customer Spatial Data Base

DTM/Ortho/Buildings

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CityPlanner

Log-in users
View
Edit
Create scenes
Share
Publish

Public users

View
Edit
Create scenes
Share
Publish
Visualisation in the cloud

- PhotoScan
  By Agisoft
- Smart3DCapture
  By Acute3D
- StreetFactory
  By AirBus Defence and Space
- PhotoScan
  By Agisoft

Local data storage

Customer Account

Customer Spatial Data Base

DTM/Ortho/Buildings

ArcGIS

Log-in users
- View
- Edit
- Create scenes
- Share
- Publish

Public users
Analysis of sight, shadow, height, alternatives

Screenshots from CityPlanner project by Silkeborg kommune and Laban Arkitekter A/S
Central publishing to show room, web and mobile

- Publish
- Web
- Large touch screens
- Show room
Publish interactive view of projects

Göteborg – Norra Masthugget

Kungälv - Vena 1:3

Norrköping - Dalkarlen

Norrköping - Rosen 6
Infrastructure visualisation
Flooding/sea level visualisation

Today

+ 2,8 meters

+ 1,8 meters

+ 3,8 meters
Platform for citizen dialogue
3D view integrated in existing 2D web GIS

Seamless 2D & 3D web experience

Visual query on object click
Energy visualisation

Thermal scanning

Thematic colours
Summary

Cities, organisations, municipalities
• Affordable easy to use visualisation services
• Available at home, office or meetings
• Powerful publish and dialogue features
• Scalable subscription costs
• Handle large data sets

Data provider
• Opportunity to publish 3D data in existing framework with worldwide reach
• Control data process
• Upsell opportunities
Thank you