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EDITORIAL



Dear Reader,

In this edition, we are leaving the floor to our local authority and police sector clients: four testimonials directly inspired by everyday experience. These achievements deserve our fullest attention, in view of the extent of the involvement of the police officers and the municipal officials.

From the large scale introduction of the Orbit portfolio to the Wetteren police, the specialist applications for the City of Vilvoorde, the Ypres police and the Municipality of Zulte, each of these testimonials enables the reader to understand how the applications and processes were implemented in those administrations, thanks to the motivation and the dialogue of an entire team. And you, where are you in your plans?



By reading these case studies, you will see that all such challenges can really be met!

Have a good read!

Peter Bonne

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VISIONARY GIS POLICY AT THE CITY OF VILVOORDE BEARS FRUIT FOR MANAGING PLOTS OF LAND AND PERMITS



Photo: Ludo Everts (standbeelden.be)

To remove any discrepancies in AGIV's GRB system used by the drafting department and the land registry maps coloured in by other departments, the City of Vilvoorde called on Orbit GT for help. Very quickly, Orbit GT transferred the main data layers, grafting them on to the Land Registry map, correctly to the administrative plots of land (ADP) stored in the GRB. The result: fewer errors, uniform base maps and another step forward for this already particularly GIS-aware City.

Working with GIS

The City of Vilvoorde has been playing a pioneering role in the development of GIS (Geographic Information Systems) policy for a number of years now. This includes appointing a full-time GIS coordinator and establishing a GIS workgroup that meets every six weeks to fine-tune current operations and exchange new ideas. Orbit GT in Lokeren has long been the provider of GIS software to the City of Vilvoorde. And together they have achieved some

great results. A number of different Orbit GS modules are currently in use by the City council. There is positive synergy between all departments, the maps they produce are beautifully finished and, thanks to the vigilant eye of GIS coordinator, Veerle O, there are no gaps anywhere.

"GIS offers much more than a conventional database. The geographic aspect gives us a clear overview of the results from our queries. On my desk at the moment I have the finished

maps for our fight against weeds, clearly showing which areas need to be treated and in what way. Even drafting things such as the notary's letter for the work is totally automated in Orbit. And there are countless other applications in which GIS makes life easier for us. As an investment it certainly pays its way," says Veerle O.

Sixty layers of data

Every council drafts the outlines of the permits it issues on a map showing the individual plots of land. This map is published every year by the Land Registry. The City of Vilvoorde has overlaid sixty layers of data on to the map in Orbit: e.g. districts, planning register, BPA (Special Building Plan), planning permits, environmental permits, etc. Users in each department can retrieve the map they need in the software and draw in new information on the correct plot of land. The maps feature approximately 15,500 planning permits, about 520 land allotments and some 1,200 environmental permits, etc.

"By converting land permits from the Land Registry map to AGIV's large-scale reference database (GRB), we now have maps in every department that are consistent and accurate from a surveying point of view."

Veerle O, GIS coordinator, City of Vilvoorde

Veerle O: "The Flanders Geographic Information Agency (AGIV) has been supplying us with the large-scale reference database (GRB) since 2009. In addition to the plots of land and buildings, this database also features all streets, waterways, etc. The GRB is also a good deal more accurate in terms of surveyed land than the Land Registry's map. It also corresponds better with the orthophotos."

It was for this reason that it didn't take long for the drafting staff at the City of Vilvoorde to switch over to the GRB, with the other departments continuing to work with the maps from the Land Registry. The result was that two types of base maps were in circulation, with

coordinates that did not entirely match. This was inefficient – quite apart from leading to errors in interpretation. As a result, the City took the decision to move over to AGIV's GRB.

Orbit GT assists with the switch to GRB

Orbit GT was called in to help transfer the sixty layers of data from the Land Registry map to the GRB. They used an automatic process to transfer the eight most difficult and critical layers from the Land Registry map to the ADP stored in the GRB. To ensure a conclusive result, a manual check was also carried out on a series of vital points, such as permits on plots of land that had disappeared as the result



Permit outlines registered show a shift in relation to the Adp

“GIS offers much more than a conventional database. The geographic aspect gives us a clear overview of the results from our queries. There are so many applications for which GIS makes our lives easier. As an investment it certainly pays its way.”

*Veerle O, GIS coordinator,
City of Vilvoorde*



of land changes, or permits on plots where there were survey-related or similar size discrepancies compared with the ADP. As a result, Orbit was able to untangle the problems in a short space of time.

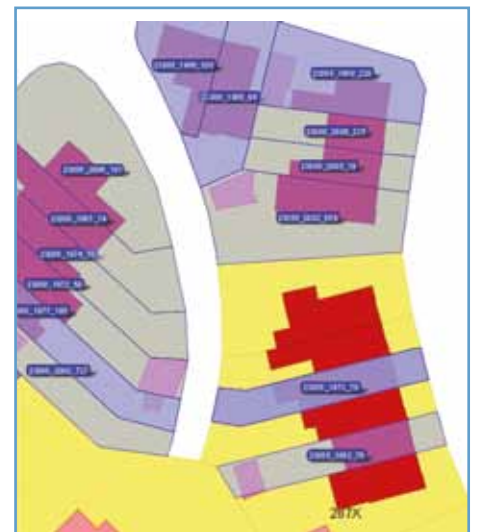
Veerle O recalls: “The rest of the data layers I am able to transfer myself easily on to the AGIV map, including the Central Reference Address Database (CRAB). I plan to have everything completed by the end of 2012. Once it is done, we will be able to rely 100% on all layers of data and no longer have any incorrect coordinates passing

between the various departments.”

Ready for the future

Thanks to the GRB, the City of Vilvoorde is not only working a good deal more efficiently than before, but it is also giving the council a head start for the future. From 2015, when the GRB covers the whole of Flanders, councils will be obliged to use it. In the meantime, by investing early in GIS and switching over to the GRB this year, the City of Vilvoorde has a major head start on other councils in Flanders.

“Some councils are still all too often not giving priority to GIS. They don’t have a guiding force on the council board or a dedicated person to handle the day-to-day coordination. This means they are missing out on all the advantages of GIS. They often have maps with gaps and have to waste time doing manual tasks that can easily and clearly automated with GIS,” concludes Veerle O.



Left: the old permit outlines in relation to the land registry; Centre: the old permit outlines in relation to the ADp; Right: the amended permit outlines, positioned in relation to the ADp

YPRES POLICE UPGRADES TO ORBIT INFOCENTER

FAST, SIMPLE ACCESS TO VITALLY IMPORTANT ISLP INFORMATION DURING CALL-OUTS



Ypres police – which has a staff of nearly 270 – was looking for a simple way of accessing valuable information from the ISLP administration and operations software system. Given the wide geographic coverage of the zone's services, it can be a matter of life or death on urgent call-outs for the team in the field to have a full history of the person or address involved. With Orbit InfoCenter, it takes just a few seconds to display all of the relevant information on-screen so that the dispatcher can brief the intervention teams immediately.

At 640 km², the operating area covered by the Ypres Police is one of the largest in Flanders. In all, the district encompasses the municipalities of Ieper, Poperinge, Wervik, Zonnebeke, Heuvelland, Moorslede, Staden, Vleteren, Langemark-Poelkapelle and Mesen.

After the area's policing service went through its major reorganisation, both state and local police were combined into a single Police Zone aimed at achieving maximum performance at a lower cost. Today, 221 operational and 47 administrative staff service a total population of 124,000 people.

Retrieving information from the ISLP system is often time-consuming

The ISLP system that was introduced in the nineties at Ypres Police was still being used as the central management application. Using a range of different modules, ISLP handled processing, archiving and the exchange of all operational and administrative information within the police zone.

Georges Aeck, Chief Commissioner at Ypres Police: "ISLP is an excellent system, but running queries could be time-consuming and laborious because the system was made up of different modules that often needed to be interrogated separately."



“When it comes to a call-out, you need to be able to give your officers all the information they need: have weapons been found at the address in the past? Have criminal offences been committed there in the past? Are there any other dangers? It’s at times like these that you realise how important Orbit InfoCenter is.”

*Georges Aeck, Chief Commissioner,
Ypres Police*

When there was a request for action at a specific address, for example, the dispatcher had to run a number of queries through the system: what incidents have occurred at the address in the past? Are there any matters outstanding? What was the most recent report? What action has been taken there in the past?

The increase in scale following the reorganisation of policing in the area only made the problem more acute: it was no longer such a simple task to share information across the various locations and computerisation was gaining pace.

Better use of information

Ypres Police had already been using Orbit Police Suite for a while. This is the software package provided by Orbit GT in Lokeren.

In 2007, Chief Commissioner Aeck spoke to Orbit GT about his requirements: “I didn’t simply want to replace ISLP, but I was looking for a way to use the information in the system better by making it easier to access. Orbit GT got to work immediately and suggested working together to develop a solution.”

Orbit InfoCenter

After an in-depth needs analysis, Orbit GT came up with a product that met the requirements of Ypres Police in full: ‘Orbit InfoCenter’. Today, both the 221 operational staff and 47 administrative workers at the Arro Ieper Police Zone are very pleased to be using this web application.

“The best way of viewing Orbit InfoCenter is to see it as an intelligent layer on top of ISLP. A single mouse-click enables us to retrieve all the information we need from the system relating to a particular person or address, for example,” says Commissioner Aeck.

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2011	10000	1000000000	Verdovende stoffen	2011-01-01	10:00	Grote Markt	1	IEPER
2011	10000	1000000000	Verdovende stoffen	2011-01-01	10:00	Grote Markt	1	IEPER
2010	10000	1000000000	Verdovende stoffen	2010-01-01	10:00	Grote Markt	1	IEPER
2010	10000	1000000000	Verdovende stoffen	2010-01-01	10:00	Grote Markt	1	IEPER

Today, the Orbit InfoCenter database contains the details of 130,000 people, 35,000 reports and 20,000 interventions. The data in Orbit InfoCenter is updated every night by 34 automatic queries in ISLP. A 1-year history is imported for most of the information, but for the weapons register and alarm register, the history is unlimited.

Saving time can be a matter of life or death

Reports come straight into the Ypres Police Dispatching Centre. This might result in an intervention of some kind on site, which is then followed by a completion or incident report. On any urgent call-out, every minute can be a matter of life or death.

Chief Commissioner Aeck: "When it comes to a call-out, you need to be able to give your officers all the information they need: have weapons been found at the address in the past? Have criminal offences been committed there in the past? Are there any other dangers? It's at times like these that you realise how important Orbit InfoCenter is."

With Orbit InfoCenter, the dispatcher only has to enter one query to see all of the relevant information about a particular person or address on the screen.

Relationship of trust with software partner Orbit

As a result of the success at Ypres Police, Orbit InfoCenter has since been rolled out in many other police zones. Chief Commissioner Georges Aeck is full of praise for the way the software company works so well with the police: "Orbit GT not only listens to our dreams, but also makes them come true. Using their approach from a central geo-information database, Orbit GT has a powerful tool in its armoury for offering police forces innovative applications that make life easier for them."



New projects in the pipeline

There are also a number of different new projects with Orbit GT in the pipeline at Ypres Police. For example, there is a plan to introduce a GPS surveying system that uses digital point-to-point measurements to save significant amounts of time in recording and producing incident sketches for traffic accidents.

Another Orbit application that has caught the eye of Ypres Police is Automatic Vehicle Location (AVL). To optimise the input from intervention teams, the Orbit AVL module makes it possible to carry out the necessary post-analysis of a vehicle's route, starting from the incoming call through to dealing with the incident on the spot. AVL makes it possible to draw quick conclusions from points of view such as the vehicle, location (district) in the zone, as well as in terms of a query in the Orbit analysis modules. Has the most appropriate vehicle been dispatched? When and for how long has a patrol been going on in a particular district?

"The AVL application, combined with the AVL report enables us to learn lessons from the past and then make adjustments where necessary in the future," says Chief Commissioner Aeck.

A third project at Ypres Police is the intensive use of the Orbit Asset Inventory. This initially will involve making an inventory of all speed cameras and manned speed checkpoints, together with their history. Chief Commissioner Aeck: "This information can be especially valuable in analysing changes in driver behaviour as a result of speed checks."

Working in an integrated way

Working with a single central software partner for all of these applications has nothing but advantages according to Chief Commissioner Aeck: "Using a software system such as Orbit, in which everything is linked, you can really work in an integrated fashion as a police zone. For example, you can retrieve information much more quickly, you make fewer errors and you also avoid entering data twice."

POLICE WETTEREN-LAARNE-WICHELEN SHARPENS ITS FOCUS WITH THE HELP OF ORBIT

The Wetteren Police has ditched pencil and paper and switched to accident reporting on Orbit. But using this GIS application goes much further than simply making accident sketches look more professional. Crime analyses, defining perimeters, traffic black spots and mobile phone research are just some of the hot items for which digital maps and orthophotos are delivering added value in the police force. It's an investment that pays, according to the Wetteren-Laarne-Wichelen police.



“A GIS tool such as Orbit is used mainly to support operations, but it is also very useful as justification tool for the police college, local authorities and the man in the street. In fact one picture says more than a thousand words.”

Chief commissioner Gerritjan Maes

The Wetteren-Laarne-Wichelen Police is responsible for the safety and security of its 44,000 residents. This dynamic category 2 zone keeps the public informed of its most recent actions via Twitter and Facebook. Because it is located so near to the E40, R4 and E17 roads, this particular police zone is very susceptible to break-ins. This is an ongoing topic for attention in the local security plan operated by the local police. The police station is situated on Zuiderdijk in Wetteren. The zone has 108 members of staff.

“The increase in scale that resulted from the police force reforms has resulted in the teams becoming more specialised,” states Commissioner Stefan Schamp. “The changes also brought with them the immediate dangers of us becoming

compartmentalised or isolated. But by setting up local district teams, we are boosting general involvement right across the force.”

One picture says more than 1000 words

When chief commissioner Gerritjan Maes was appointed as the new head of the force in the spring of 2010, he immediately introduced a number of new ideas. One of these was the purchase of the Orbit Police Suite in April 2011. This is Orbit GT's GIS application that he had used during his time as commissioner at Meetjesland Centre Police. Orbit Police Suite works on the basis of ISLP data and is updated daily with all of the data generated by the system.

“A GIS tool such as Orbit is used mainly to support operations, but it is also very useful as justification tool for the police college, local authorities and the man in the street,” says commissioner Maes. “In fact one picture says more than a thousand words. Problem areas can be mapped much better and may, for example, help with advice about any investments required in the roads infrastructure.”

Consistent, professional accident sketches

One module that is much used in police zones is Orbit Sketch, which produces digital sketches of accidents.

Koen Reyniers, Chief Inspector Intervention, explains the advantages of Orbit Sketch: “In our zone, we record

“Orbit Crime helps us to direct our operating actions. The figures from the Federal Police act as an excellent form of interpretation and control tool at a later stage.”

Commissioner Stefan Schamp



of the area safety plan and where any additional action is required. Implementing additional patrols and mobile or fixed cameras enables us to see whether we can reduce the numbers in those locations at that hot spots.”

The Orbit Crime module is a great help. Each day, Orbit crime analyses extract the latest incidents from the ISLP database. Wetteren-Laarne-Wichelen police retrieves this data using specific parameters (such as time, location, angle) and exports it to Excel for additional processing for the balanced scorecard.

“This gives the intervention teams a regular update on the break-ins for the previous week. The annual analysis figures from the federal police give us good material for interpreting and checking the Orbit/ISLP figures,” adds Commissioner Schamp.

“Orbit Crime is designed to help us focus our operations during the year. Each department will then also be given access to data of interest to it in Orbit.”

A few practical applications

In an orthophoto, buildings, trees and all sorts of obstacles are clearly identifiable, meaning that access to a particular area can be better assessed.

At Wetteren police, orthophotos are also used to define routes and perimeters during demonstrations.

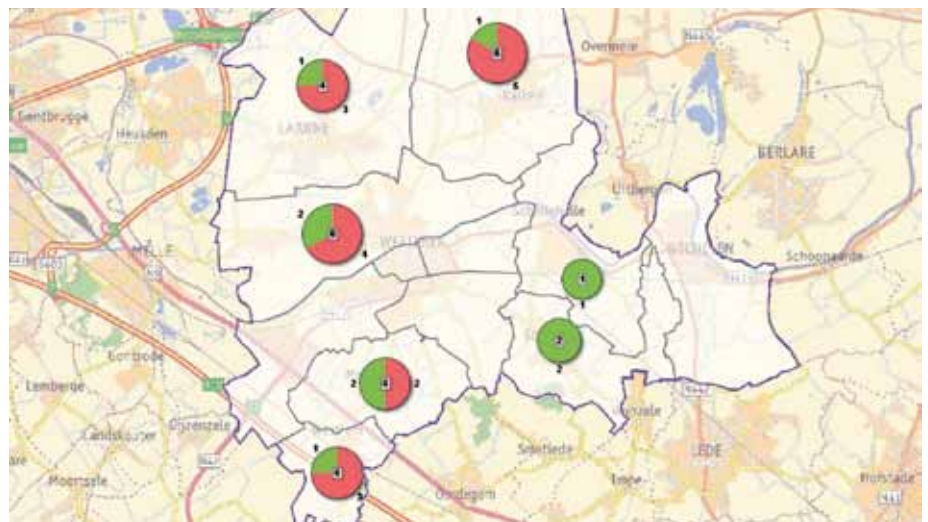
Research has since shown demand for the coverage of all mobile phone masts to be mapped or placed on an orthophoto, along with the parameters enabling an operator to switch to another mast, so that a telephone investigation can define the relative position of a suspect or missing person.

The new local area teams at Wetteren-Laarne-Wichelen police have also been delineated. All incidents recorded are mapped using an automatic query system and each local area team is given a summary. These summaries

enable the workload of each team to be assessed better and the areas themselves are redrawn and optimised while taking account of the manpower and resources available.

Investment pays

“Orbit can be used in 1001 different ways to improve the way we work,” concludes Commander Maes. “It’s just a question of looking creatively for interesting applications. That’s why it is vital for police forces to exchange their experiences with each other and inspire one another. The investment starts paying as soon as Orbit applications are incorporated into a large whole and when you focus on safety policy.”



Analysis of burglaries, per incident code group, grouped by police district

ZULTE FULFILS GREEN VISION WITH ORBIT ASSET INVENTORY

The municipality of Zulte is proud of its nickname of 'the green council' and is always willing to do everything it can to keep it that way. To make Zulte's green vision come true in a professional manner, the department of Land & Territory Matters is able to count on the software of the Orbit Asset Inventory. This program is used to establish the existing status of standard roadside trees and also acts as a guideline for implementing a consistent policy on greenery.



The municipality of Zulte is situated in the Leiestreek, on the border between East and West Flanders. Made up of the sub-municipalities of Zulte, Olsene and Machelen, the merged municipality has a population of 15,000 residents, spread across an area of 3,400 hectares.

"When it comes to council administration, we have always tried to do as much as possible with a limited staff," says Ludwig Vanluchene, Department Head Land & Territory Matters at the Zulte council.

A vision of greenery

In the old days, the area around Zulte was blessed with abundant forests. After significant deforestation over the centuries, the council has set itself the aim in recent years of reassessing the municipality's green character by implementing a consistent policy about the natural surroundings. An important part of this policy is the management of street planting.

Ludwig Vanluchene: "Previously, street planting was managed with little vision or structure. Various types of

standard roadside trees were planted haphazardly with one another based on guesswork. So there was no question of any consistency at a council level."

Orbit Asset Inventory

A demonstration of the Orbit Asset Inventory opened up whole new horizons for the department of Land & Territory Matters at Zulte. When it came to deciding whether to purchase the suite, it became clear that there was more to the program than just managing standard roadside trees; the same software package could



“Both the inventory and the green space plan are finally in line with one another: that is the major added value of the Orbit Asset Inventory.”

*Ludwig Vanluchene, Department Head Land & Territory Matters,
Municipality of Zulte*

also be used to create an inventory of road signs, hard shoulders and street furniture.

Making an inventory of the existing green structure

An ambitious project was embarked on as soon as Orbit Asset Inventory had been bought: to draw up a detailed inventory of the existing green structure in Zulte and more specifically the standard roadside trees. To do this, the council also used panoramic images, which are supported as part of the suite. Panoramic images are 360° panoramic photos taken at intervals of five metres. These panoramic pictures provide an outstanding street image of the surroundings, because objects can be seen from different angles. For example, all sorts of different information can be entered without having to move location. The position of each standard roadside tree can be surveyed using the panoramic images. The results of the surveyed measurements are then automatically

written to a specific theme map.

It also meant that inventories could be carried out on site. A GPS camera was usually used to do this with each shot immediately being given the correct GPS coordinates. Each photo was then

given a tag, or category, of tree type. GPS photos are also used to keep the inventory up to date if the streetscape in the cycloramas becomes out of date.

All information is recorded accurately in the Orbit Asset Inventory. This includes the type of planting, as well as the health status of each plant, the shape of the tree or shrub, frequency of maintenance, the sort of fallen leaves it produces, etc.

Clear colour pictures

Each type of inventory in the Orbit Asset Inventory can then be clearly displayed by using a specific key featuring a range of different colours and shapes. In total, 4,466 standard roadside trees have been mapped for the whole municipality.

“Each type of tree is allocated a specific colour code in the Orbit Asset Inventory. The benefit is that you can see any anomalies on the digital map at a glance – as well as when you need to take action if for example there are too many different types together,” says Ludwig Vanluchene.



Detail of the inventory of standard roadside trees, colour-coded per type of tree.

New green vision in practice

Once the inventory was completed, Zulte was able to produce the conceptual design for its new green space plan. The use of colours and symbols for each theme in the Orbit Asset Inventory provided an outstanding tool in the process.

Fortunately, the Municipality of Zulte was also able to call on the expertise of a specialist in its own team for the task – Wouter t'Kindt – whose input was of huge value to the whole project.

Ludwig Vanluchene: “The new green space plan has to be carefully thought through and every choice properly reasoned. We wanted a specific type of tree of each environment: one that wouldn't grow to be too big, with no fruit to drop in housing estates; pillar-shaped trees along narrower approach roads, stately trees to line (former) avenues, etc.”

Once everything has been clearly mapped, the department of Land & Territory Matters will have all the information it needs for the local council. This information will be used to draw up detailed specifications for new plantings that can then be passed on to the purchasing department.

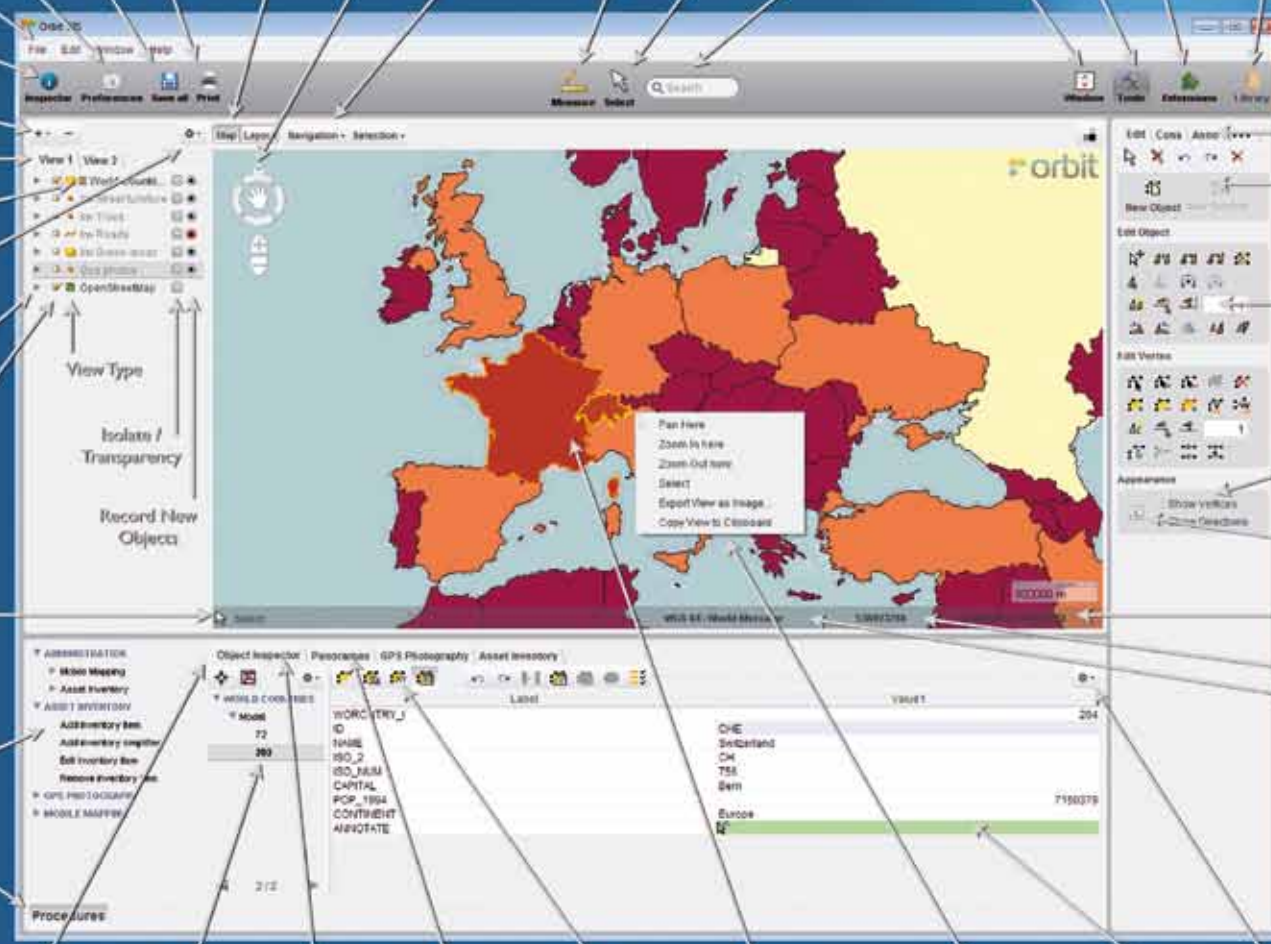
Handy work tool

The introduction of the Orbit Asset Inventory has laid the foundations at Zulte for a proactive and properly structured policy on its green spaces. The suite's users continue to discover new capabilities and the application is expanded regularly to make best use of the valuable information it provides.

The product is already being used to create and maintain other inventories. Road signs can be updated digitally without having to drive along all of the streets. The condition of the street furniture – a total of 1,382 items – is also monitored with the Orbit



ORBIT GIS X. Making GIS so easy.



The screenshot shows the Orbit GIS X interface with a map of Europe. A context menu is open over a country, listing options: Pan Here, Zoom In Here, Zoom Out Here, Select, Export View as Image, and Copy View to Clipboard. The interface includes a menu bar, a toolbar, a layer list on the left, a main map area, and a bottom panel with an object inspector and attribute table.

Labels on the left side:

- All Preferences & Settings
- Fast Print
- Intuitive Navigation
- Fast Measure
- Fast Select
- Workspace Menu
- Fast Save All
- Map-Layout Switch
- MapCanvas Menu
- Overall Search
- Fast Object Inspection
- Add / Remove Layers
- Multiple Lists
- Needs Save
- Dataset List Controls
- Fold Content
- On / Off / Solo / SoloSafe
- Active Function
- Procedure Wizards Library
- Procedures On / Off
- Advanced Search Panel
- Selected Objects List
- Intelligent Object Inspector
- Extension Panels
- Focus Object Visual / Summary / Co-ordinates / Attributes

Labels on the right side:

- Tools Sidebar
- Extensions Sidebar
- Layers Sidebar
- Fast Access
- Main Tools
- Clear Functions Layout
- Main Appearance Options
- Direct Preferences Access
- Mouse Co-ordinates
- Scale Settings
- CRS Settings
- Attributes Context Menu

Bottom Panel Content:

WORLD COUNTRIES	Label	Value1
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72	NAME	
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