

**ORACLE®**

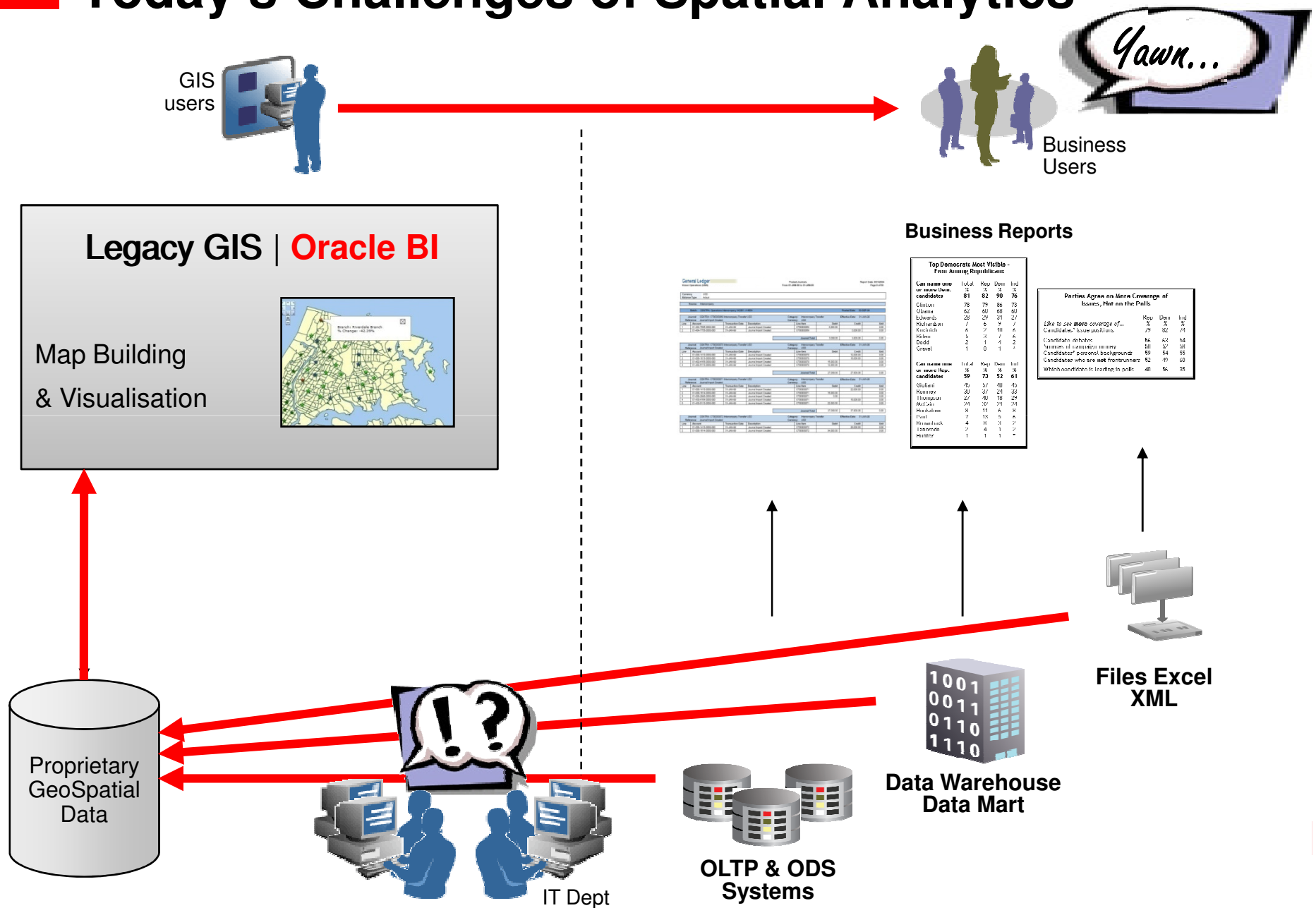
**NAVTEQ™**

# Location Intelligence Cases

*Barry Mostert*

*BI Business Development EMEA*

# Today's Challenges of Spatial Analytics



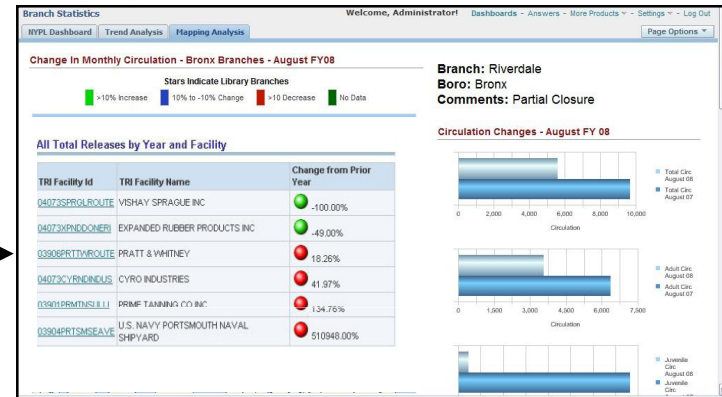
# The Solution: BI with Spatial Analytics



Legacy GIS | **Oracle BI**

Map Building & Visualisation

Enterprise-wide, Personalised, self service, interactive, Embedded GIS



BI Dashboards, Charts and Tabular views

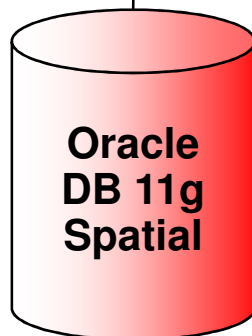
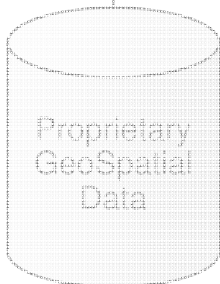
Enable mapping of any enterprise metrics

Non-Spatial Data provider

Spatial Analytics to enrich reports

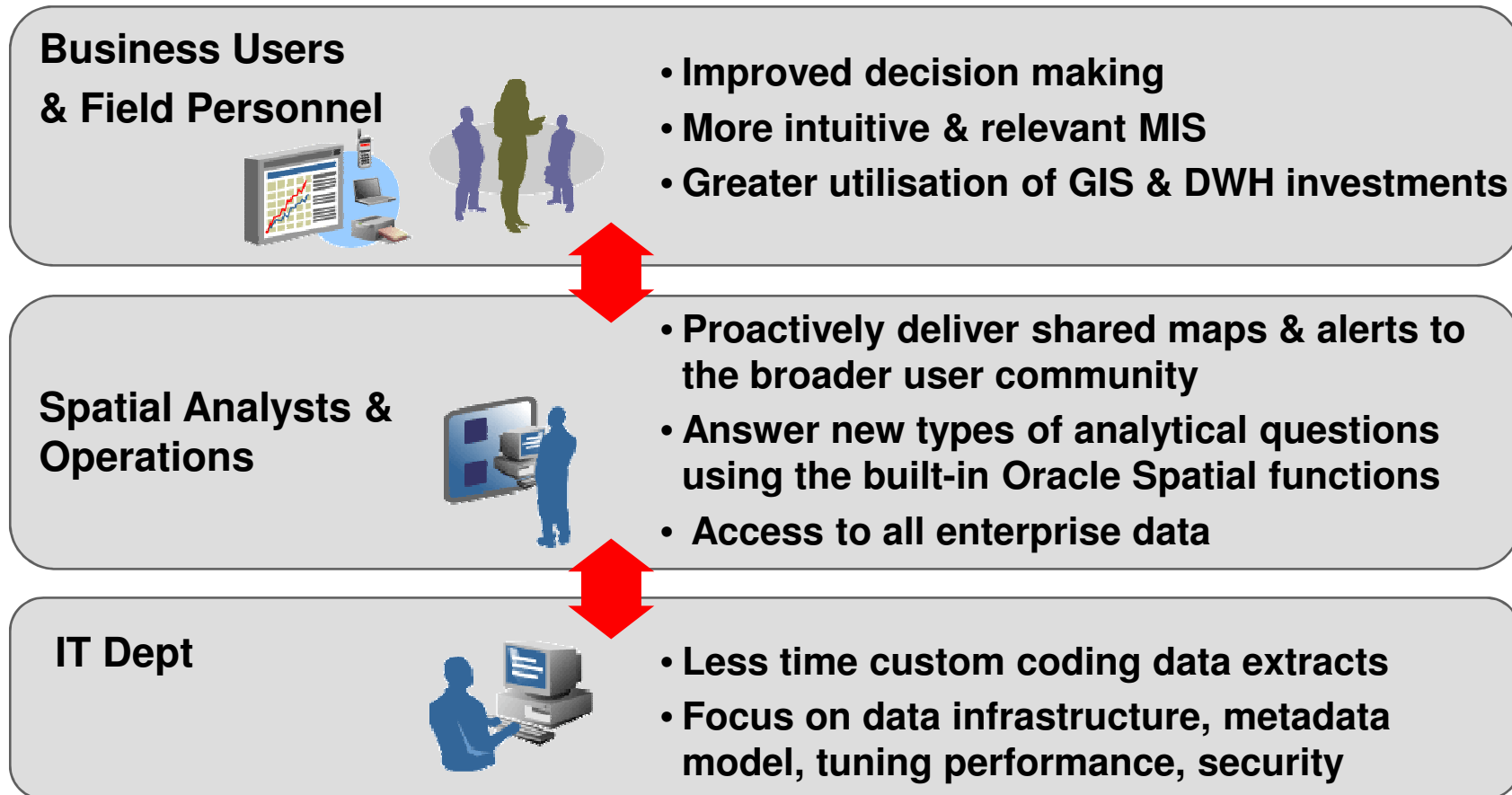
**Common Enterprise Information Model**

**Oracle BI Server**



# Spatially-enabled Enterprise BI

Reduce IT backlog while increasing self-sufficiency







Public Sector - Agriculture

# AGREA

# AGREA

## Business Situation

- AGREA is a governmental organization in charge of distributing EU funds and economical aid to farmers in the region of Emilia-Romagna.
- AGREA manages the whole process from farmer application to funds distribution.



Regions -> Provinces -> Cities

# AGREA

## Challenges

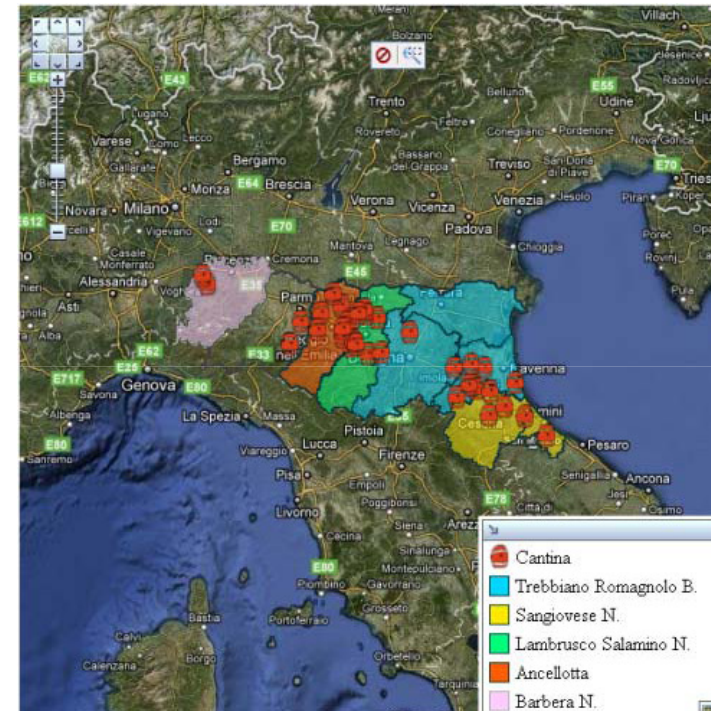
- How can we speed up controls to decide application eligibility?
- How can we measure the impact EU Policies have on territory?
- Can we better estimate investment risks?
- How to optimize fund distribution?
  
- Multiple internal data sources for fund application modules, farmer demographics, areas by grape typology.
- Multiple external data sources for weather data, points of interest (eg farm locations, agro-tourism centres).



# AGREA

## The Solution

- Integrated system that combines the variety of data sources
- Present information in a unified and trustworthy manner incorporating geographical information
- Create a 360° overview to monitor the business and enable swift decision making
- User self service dashboards with intuitive graphical interface





# UK Water Corporation

Utilities – Water

## UK WATER CORPORATION



# UK Water Corporation

## Business Situation



- One of the largest water and waste water services supplier in the UK with over 4 million customers.
- Serving the Eastern region of the UK presents major challenges in Asset Management
  - Over 50,000km of water pipes,
  - 45,000km of sewer pipes,
  - 1500 waste water treatment works (incl 1000 septic tanks)
  - 300 water treatment works
  - + pumping stations, sludge treatment centres, reservoirs.
- Regulators have been treating all UK water companies more rigorously with recent examples of fines in the millions of £s, mostly for misreporting of operational and customer service data





# UK Water Corporation

## Challenges

- 1. Reduce Operational Expenditure** (to free up money to invest in pipeline and treatment works replacements to increase water quality)
- 2. Optimise Capital Expenditure** (to make sure they are spending their money on the right parts of the network – i.e. those parts that are contributing to water quality failures and supply outages)
- 3. Improve Customer Service** (to meet aggressive targets set by the Water industry Commissioner to get up to the standards of the English water companies)
- 4. Improve Regulatory Compliance** (to meet aggressive targets for improvements in water quality, improvements in health & safety standards and reduce fines imposed by the environmental regulators).



# UK Water Corporation

## The Solution



- **Self-service** BI and exception-oriented dashboards with drilldown for causal analysis
- Moving to **near real-time business information** from historical reporting
- **Combine a significant amount of information** about assets, customers, telemetry and many related factors (e.g. weather) potentially from multiple sources.
- “I want my team to look for trends, to plan in risk”
- Improved operations and also provides accurate, **trusted information back to the regulators** to justify performance and aberrations
- Provide **spatial intelligence to manage incidents and plans** for above-ground and below-ground assets.





# UK Water Corporation

## Oracle & NAVTEQ / BI & Spatial solution



ORACLE Interactive Dashboards My Dashboard Counties Individual Zone Details WOA Level WSZ Level

Counties Welcome, Demo User! Dashboards - Answers - More Products - My Account - Log Out Page Options

Test Description: Iron Company Name: (All Choices) Year: 2008 Month: [ ]

**Filter on Pollutant water test results**

### Region Analysis

Region	Avg Entry	Unit of Measure
Norfolk	574.70	µgFe/l
Kent	351.08	µgFe/l
Essex	175.43	µgFe/l
Derbyshire	115.74	µgFe/l
West Sussex	108.60	µgFe/l
Worcestershire	89.93	µgFe/l
North Yorkshire	82.33	µgFe/l
Nottinghamshire	81.33	µgFe/l
Herefordshire	70.00	µgFe/l
Cheshire	68.25	µgFe/l
Suffolk	66.04	µgFe/l
Hampshire	47.15	µgFe/l
Lincolnshire	43.95	µgFe/l
South Yorkshire	39.00	µgFe/l
East Sussex	36.89	µgFe/l

Records 1 - 15 Modify

### Region Analysis Map

Individual sample failures highlighted with red stars. Regions are shaded based on the average sample value. Click to see details and drill down to the WOAs within a Region.

**Avg Pollutant results shown on Table & Map**

### Region Failure Trend

Select Metric: Failure Count

### Contact Counts Summary

Contact Reason: Enquiry

Contact	No. Customer	No. Customer	No. Customer
---------	--------------	--------------	--------------

Done Internet 100%



*werk.be*

● ● ● startpunt voor werk en sociale economie



Public Sector - Employment

# **BELGIUM EMPLOYMENT AGENCY**

# Demonstrating Customer Transparency

## Employment Agency of Belgium

16  
throug

werk.be  
startpunt voor werk en sociale economie

- Public website for key stakeholder metrics
- Total transparency of agency performance and results to citizens
- Interactive, environment including historical trend data

The screenshot shows the IVAR website interface. At the top, there is a navigation bar with the logo 'w s e' and the text 'Interactieve cijfers'. Below this, there are several menu items: 'Crisisbarometer', 'Monitor SE', and 'IVAR'. The main content area features a breadcrumb trail: 'U bent hier: IVAR > Startpagina'. Below this, there is a navigation menu with options like 'Bevolking', 'Bevolking naar socio-economische positie', 'Binnenlandse werkgelegenheid', 'Jobs', 'Vacatures', and 'Vestigingen (met personeel)'. The main content area displays a map of Belgium with a pop-up for 'ANTWERPEN' showing 'Gemeente: ANTWERPEN' and 'Waarde: 280370'. To the right of the map, there is a 'Kies indicator' dropdown menu set to 'Aantal jobs' and a 'Ga' button. Below this, it shows 'Beschikbare jaren: 2006 - 2007' and a 'Score' of '468.337'. A legend indicates the score ranges: '25000 en meer', '10000-24999', '2500-9999', and 'minder dan 2500'. At the bottom, there is a section for 'Meer kerncijfers voor de gekozen regio: zie overzichtsrapport' and 'Verken de cijfers per thema. Kies een thema rechtsboven of gebruik het overzicht per thema (met extra uitleg)'. The footer includes the text 'In samenwerking met:' and the logo for 'werk en sociale economie'.

NAVTEQ ORACLE

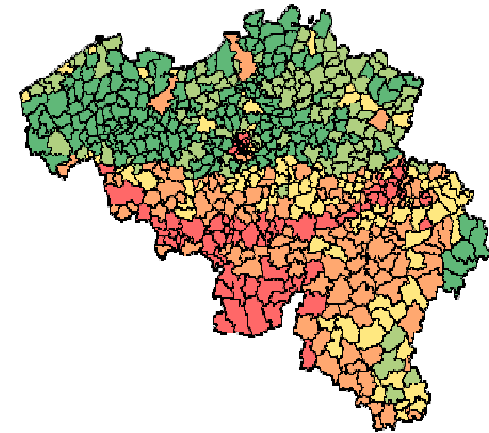
# Demonstrating Customer Transparency

## Employment Agency of Belgium

*werk.be*  
startpunt voor werk en sociale economie

### Belgium: Employment statistics interactieve Vlaamse arbeidsrekening (iVAR)

- To access: <https://www.werk.be/cijfers>
  - Then click;
    - Naar de cijfers
    - Belvolking
    - Startpagina
  - Year = 2007
  - All other filters = off
- Use Google Chrome to do live translation.





Public Sector - Police

# HOMELAND SECURITY

# POLICE – HOMELAND SECURITY

## Business Situation



- New York, Madrid, London, Moscow etc
- Law Enforcement is on the Front Lines
- Information Sharing is critical
- Must address crime as the day to day challenge
- Issue is Resources
- Technology becomes the “6<sup>th</sup> Man”



# POLICE – HOMELAND SECURITY

## Challenges



### 1. Reduce Crime and Fear of Crime

- Public Expectations
- Media Scrutiny
- Political Mandate

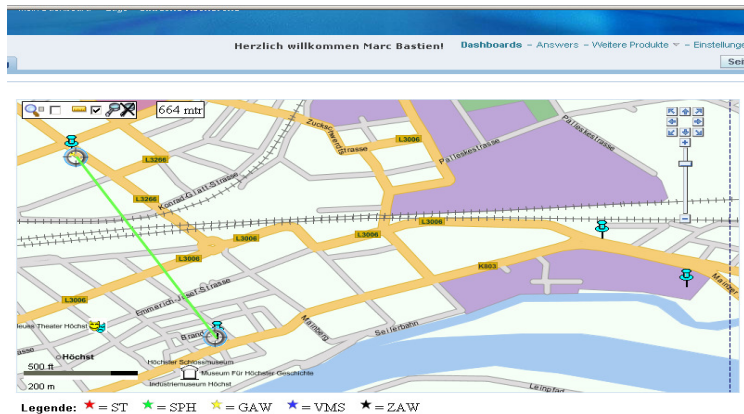
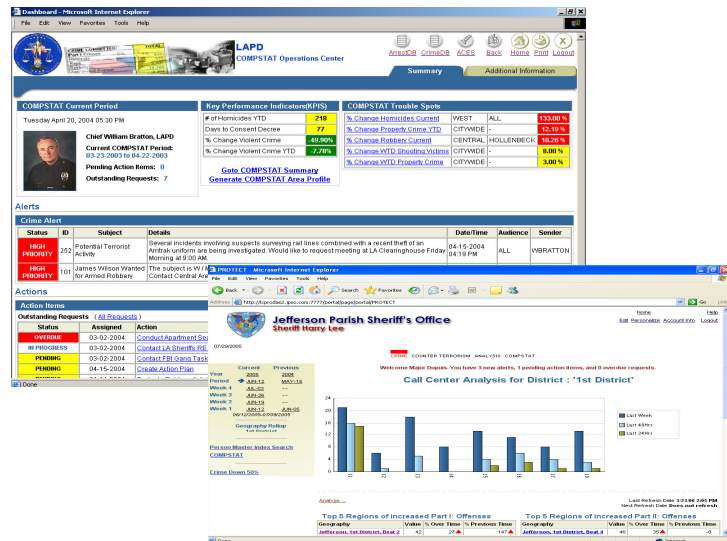
### 2. Prevent Terrorist Acts

- Once in a career problem
- Consequences of failure
- Multi-agency approach

### 3. Accomplish all with limited resources and budget

# POLICE – HOMELAND SECURITY

## The Solution



• Standardized crime situation report >> Dashboards

- Fixed defined formats, fixed times, high quality
- Deviations (time series) - abnormalities
- Maps (crime scenes, correlations)

• Search and retrieval tool for every police user (thousands)

- Easy to use
- High performance
- Fine-grained security rights (protection of personal data)

• Expert analysis tools for power user (hundred) >> Answers



# POLICE – HOMELAND SECURITY

## The Solution



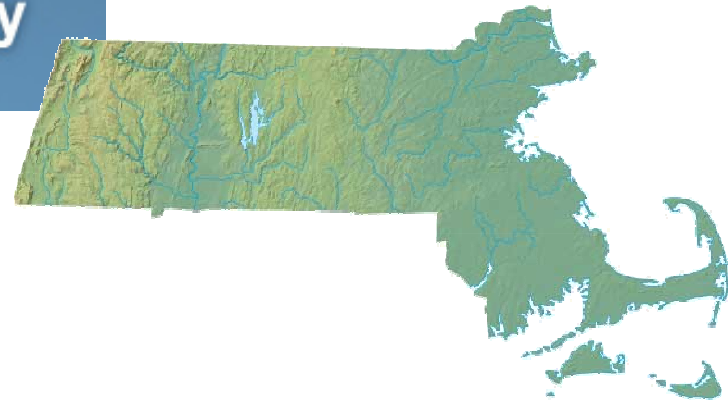
16  
hroug

Search and retrieval tool for every police user

*Easy to use >> Maps with crime scenes >> drill-down to the details*



Massachusetts Recovery



Public Sector – Employment

# MASSACHUSETTS RECOVERY

# Massachusetts Recovery

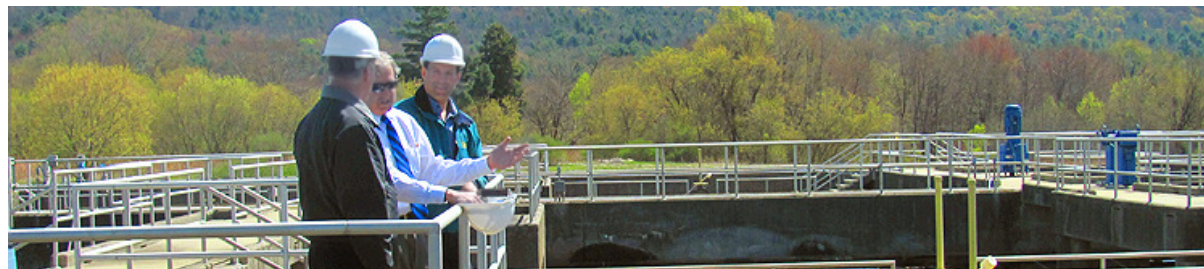


Massachusetts Recovery

## Business Situation



- Massachusetts State Agencies will receive about \$6 Billion in American Recovery and Reinvestment Act (ARRA) funds.
- Massachusetts would like to offer its residents a unique opportunity to find out how and where Recovery Act funding is being utilized.
- Need to develop a system that will allow residents to see how the Recovery Act is impacting their community and how state agencies are meeting their needs.



# Massachusetts Recovery

## Challenges

- Numerous state agencies with many disparate data sources.
- Thousands of claims to assess.
- Include “STOP Fraud” task force in all levels of the decision and allocation process.
- Making the information, by county, congressional district, or City/Town clear and easy to understand as well as accessible to Massachusetts’s citizens
- Transparency of process and allocations of funds to public



Massachusetts Recovery

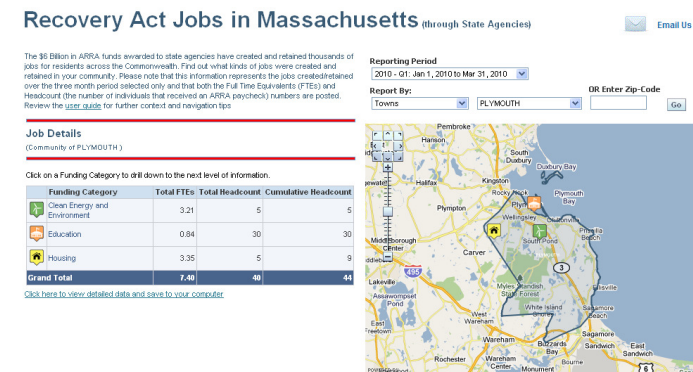
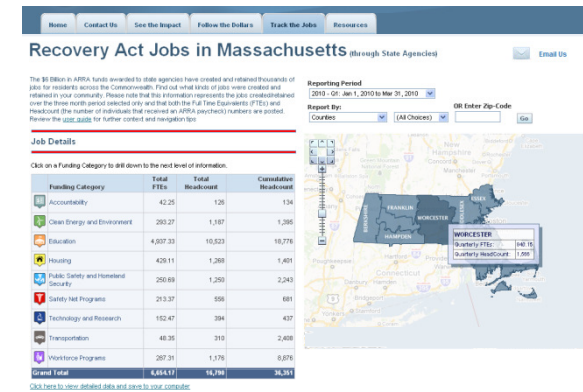




# Massachusetts Recovery

## The Solution

- Complete information transparency for citizens into the way the Commonwealth of MA has used Recovery Act funding.
- Online mapping capability for anyone to see fund allocations by “Dollars” or Jobs” to understand the impact of ARRA funds in the local communities
- Ability for citizens to drill and report on the information with no training or understanding of underlying systems





ontsi|data

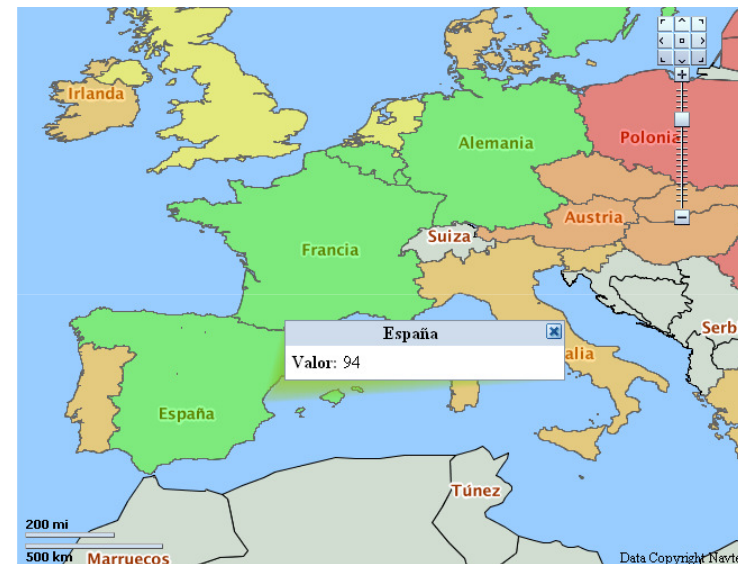
red.es

Public Sector – Industry, Tourism & Trade

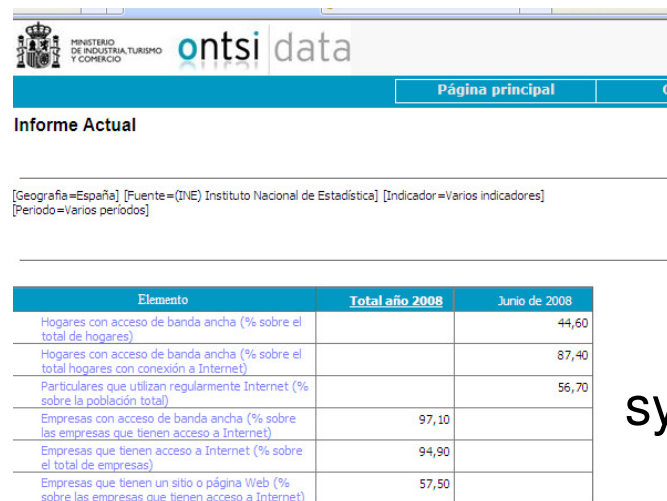
**RED.ES**



- Part of the Ministry of Industry, Tourism & Trade
- Red.es is responsible for
  - driving the Information Society of Spain
  - carrying out projects in line with the strategic priorities set by the State Secretariat
  - Telecommunications and the Information Society (SETSI)



- Key business requirement
  - Make use of available ONTSI data
  - Transparency of information to citizens of Spain
  - Integrate reports and maps of Spain, European Union countries and OECD members
  - Move to a single integrated platform to supporting both standard and spatial reporting



Informe Actual

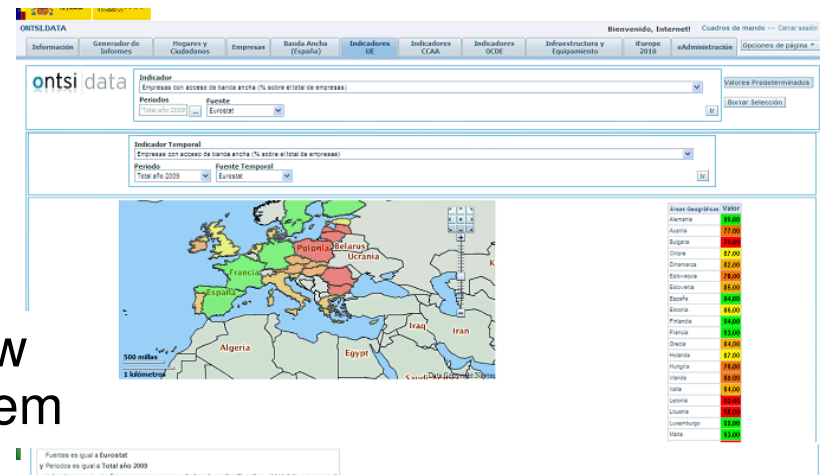
[Geografía=España] [Fuente=(INE) Instituto Nacional de Estadística] [Indicador=Varios indicadores] [Periodo=Varios periodos]

Elemento	Total año 2008	Junio de 2008
Hogares con acceso de banda ancha (% sobre el total de hogares)		44,60
Hogares con acceso de banda ancha (% sobre el total hogares con conexión a Internet)		87,40
Particulares que utilizan regularmente Internet (% sobre la población total)		56,70
Empresas con acceso de banda ancha (% sobre las empresas que tienen acceso a Internet)	97,10	
Empresas que tienen acceso a Internet (% sobre el total de empresas)	94,90	
Empresas que tienen un sitio o página Web (% sobre las empresas que tienen acceso a Internet)	57,50	

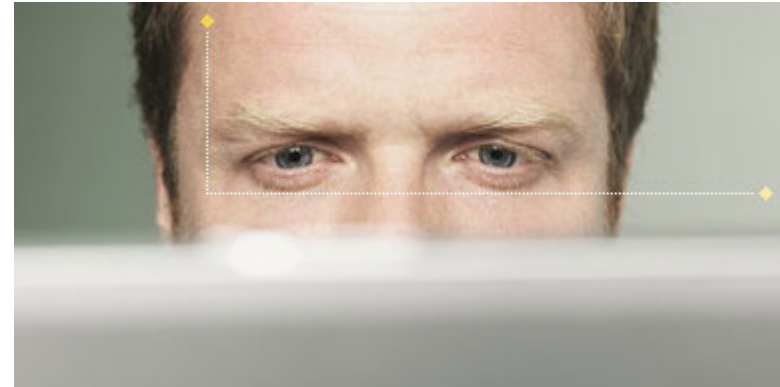


old system

new system







High Technology

# EXOR CORPORATION



# EXOR

## Business Situation



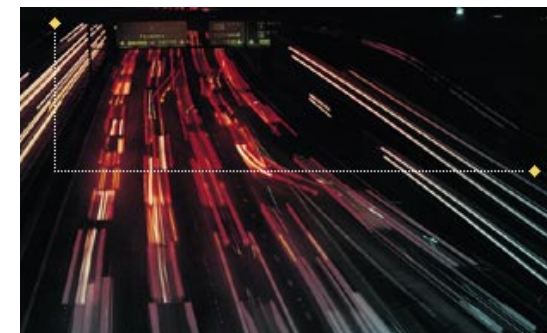
- Global Leader in **Infrastructure Asset Management Solutions**
- Founded in 1995
- 200 plus client base
- **Markets include Federal (National) and local government, utilities, telecoms and construction**
- Help maintain and manage road assets valuing in excess of \$750 billion (USD)
- **Exor systems manage in excess of 1,000,000 miles of roads**
- Offices in UK, USA, Australia and New Zealand



# EXOR

## Challenges

- Capitalize on the multi-industry **need for a suite of enhanced management capabilities for linear and other assets**, such as highways, railroad tracks, transmission lines, and drainage
- Build a comprehensive, **customer-configurable, end-to-end integrated toolset** to eliminate restrictions of competitor solutions that require predefined segmentation of linear assets
- Enable customers to reduce infrastructure costs, improve operational efficiencies, and **enhance spatial and geographic planning** while protecting existing technology investments





# EXOR

## The Solution



- Used Oracle Spatial linear referencing and geocoding features to provide an **open, scalable solution that seamlessly integrates** linear assets with other geographic information
- **Embedded Oracle Business Intelligence** Publisher to allow clients to create custom reports from all corporate data sources
- Sold Exor suite to 180 customers and won significant market share in each sector
- Cut a typical customer's annual operating budget by up to 10%
- Managed 1 million miles of roads with an asset value exceeding US\$750 billion in the first 15 years

*"With Oracle, we have deployed the world's first end-to-end linear asset management solution built on commercial off-the-shelf software."*

- **Steve Smith**, CEO, Exor Corporation



HANDHAVING VAN OVERLAST  
IN HET PUBLIEKE DOMEIN

incasso

Afhandeling

BON



High Technology  
**REDORA**

# REDORA

## Business Situation

- Redora develops innovative technology solutions that help Dutch municipalities leverage accurate, timely data to improve citizen services, maximize revenues, and comply with government legislation within tightening public sector budgets.



# REDORA

## Challenges



- Build an **end-to-end automated electronic solution** to enable The Hague to comply with 2009 Fixed Penalty Notices Act by enforcing prompt payment of fines for environmental offenses
- **Enable mobile enforcement officers** to issue on-the-spot digital fines for litter, dog fouling, illegal parking, and other violations
- Deliver a solution that **improves the productivity** of street-based officers and back office staff and allows The Hague to track the success rate of fine collections and identify city trouble spots
- Minimize development cost, **ensure scalability** for more than 1,500 simultaneous users, and add new applications on demand
- Create a configurable solution that Redora can replicate cost-effectively to meet the needs of other Dutch cities and towns







# REDORA



## The Solution = REDLINE

- Developed REDLINE Mobiele Zaken, a paper-free solution for recording fixed-penalty offenses, issuing tickets digitally, and processing fines, built on embedded Oracle technology
- **Developed basic model of REDLINE in three months** with four developers and subsequently added more functionality
- Used Oracle Spatial to **identify parts of the city where most offenses occur** to target resources most effectively
- Embedded Oracle business intelligence tools to **provide city officials with prebuilt key performance indicator reports**
- Cut time to issue parking fines from five minutes to 30 seconds
- Increased fine collection success rate from 75% to 98.5%

*“Oracle’s leading edge technology enables us to bring world class civil enforcement capabilities to municipalities in The Netherlands at an unbeatable per-user price.”*

– Gudron van der Wal, Account Manager, Redora



# Local Gov: New York City

([www.nyc.gov](http://www.nyc.gov))



- Trasparenza Amministrativa
- Stimulus Tracker: Kpi e report su utilizzo dei fondi federali
- Navigabili sino alla singola scheda di progetto
- CPR Citywide Performance Reporting KPI sul governo della città.
- I valori degli indicatori sono esplosi per competenza territoriale
- navigabili tramite mappe.

**NYCStat | Stimulus Tracker**  
Mayor's Office of Operations

TRANSLATE THIS PAGE | PRINTER FRIENDLY FORMAT

**Funding Summary**  
Funds Allocated by Category (%)

- Infrastructure
- Energy Efficiency
- Economic and W
- Health and Social
- Education
- Public Safety
- Neighborhood St
- Medicaid Relief\*

**Community District 8 MANHATTAN**  
Count: 2,456 Complaints  
% Change from Previous FYTD:  
Last Submitted Date: 06 / 2009  
Area: 2 sq. miles  
Population: 215,199

**Performance Mapping Report**

Indicator Name	Fiscal Year To Date	Previous FYTD	FYTD Variance	Most Recent Month	Same Month Last Year	Month Variance	T
Air complaints received	5,030	5,986	-16.0%	594	694	-14.4%	1
Water main breaks	146	224	-36.4%	42	66	-36.4%	1
Noise complaints received	16,191	20,659	-21.6%	1,723	2,244	-23.2%	1
Asbestos complaints received	564	793	-28.9%	73	102	-28.4%	1
Number of Priority A (emergency)	9,792	12,319	-20.5%	1,381	1,700	-18.8%	1

NYCStat Home

# Ministry of Health in Turkey

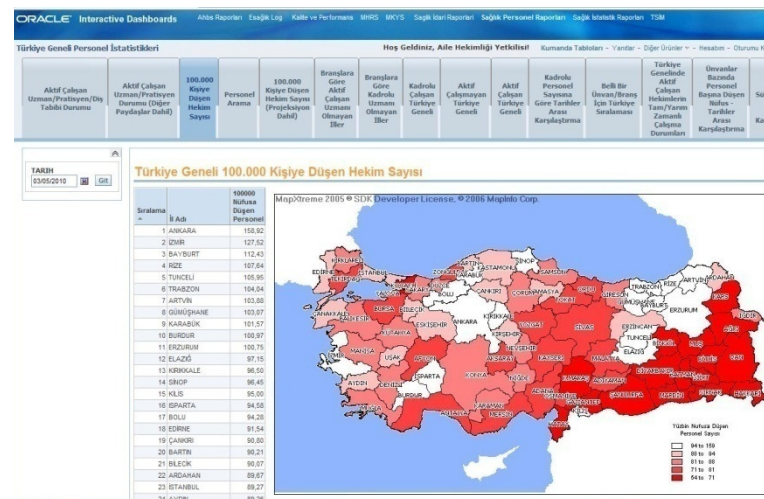
“DSS for National Health”

## Business situation

- Vision : “Responsible for all Healthcare operations in Turkey”
- Over 300.000 Employees
- Over 2000 Hospitals

## Account Situation before OBI

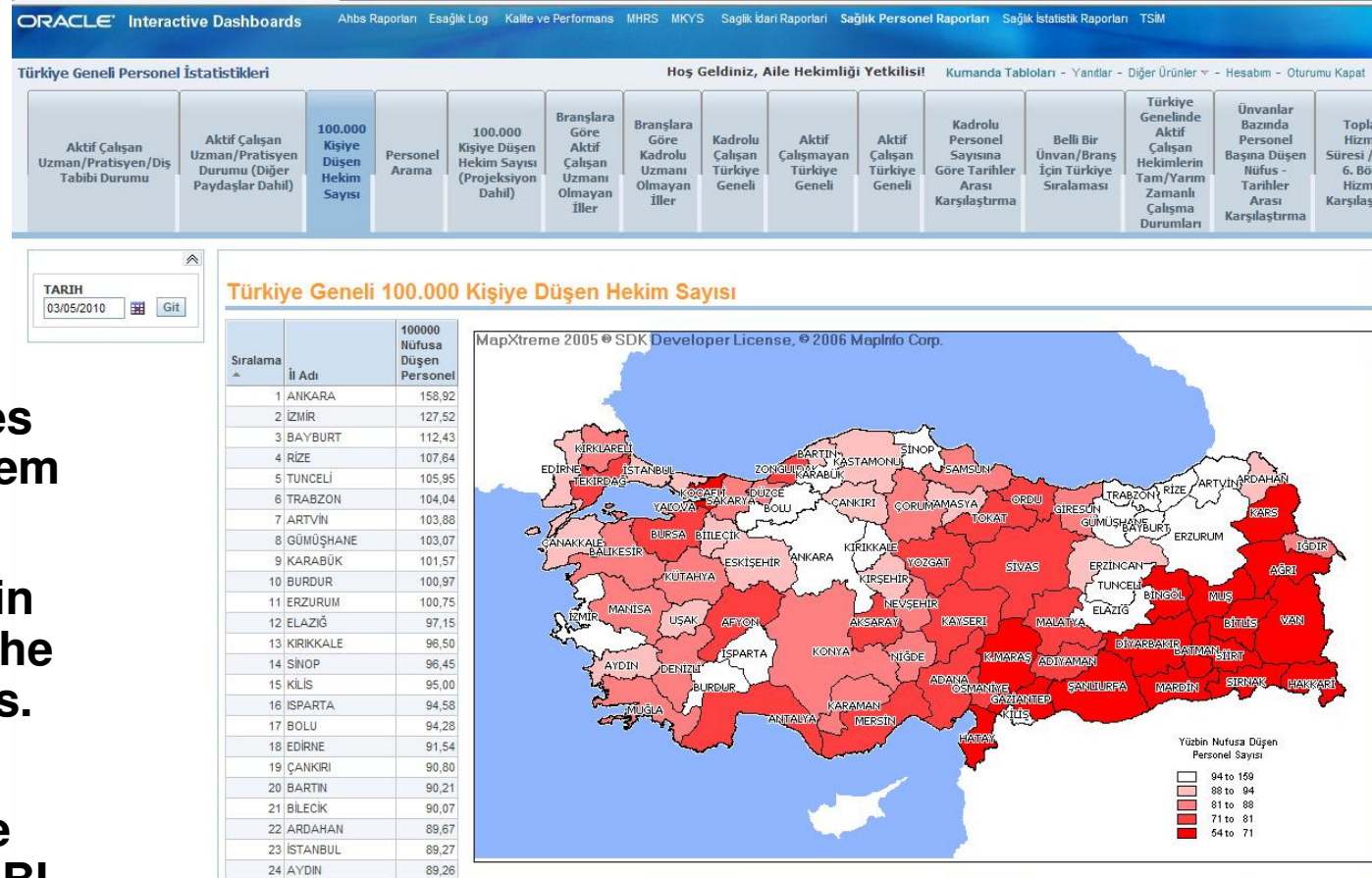
- A disributed BI structure,
- No Corporate standards



Over 20.000 BI users,  
10.000 user/day

- “Pervasive usage of standardized KPIs across the whole organization enables benchmarking of hospitals and geographical areas”

# Human Resources Management System

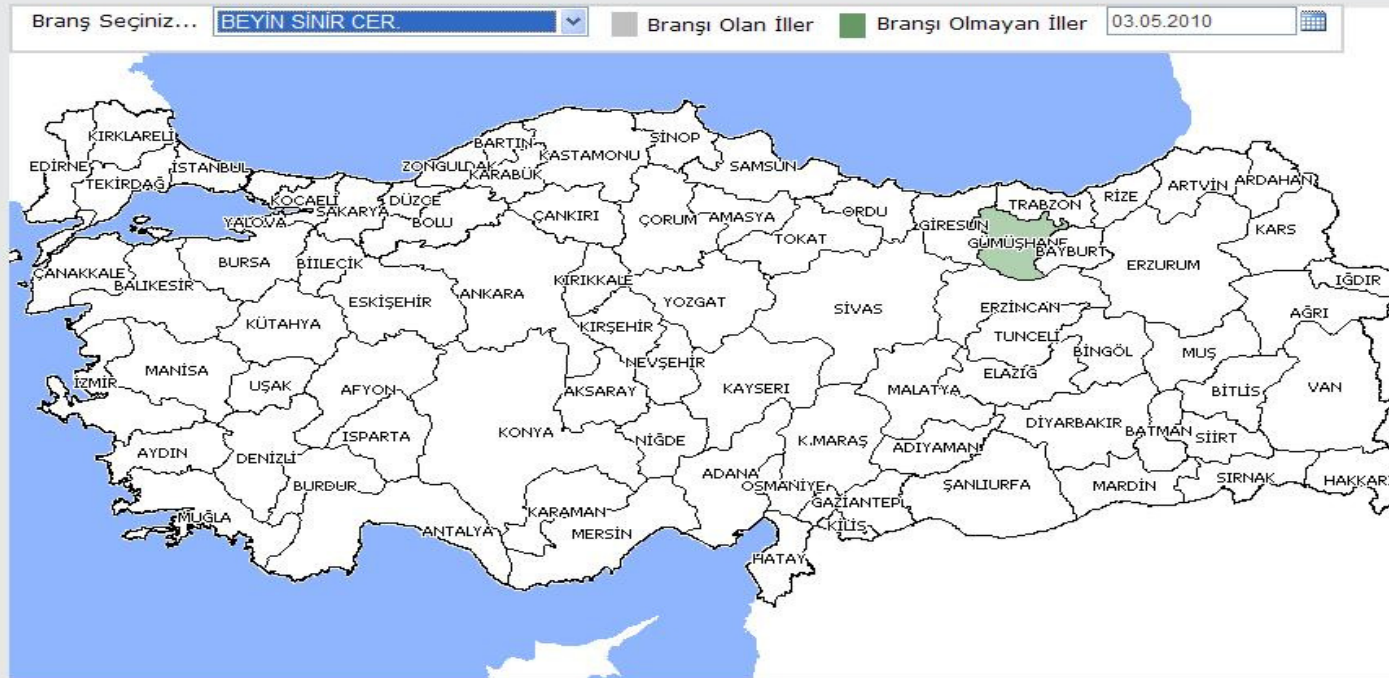


## Human Resources Management System

Distribution of medical doctors in Turkey based on the cities and regions.

Allocations and distributions are revised based on BI reports

# Human Resources Management System

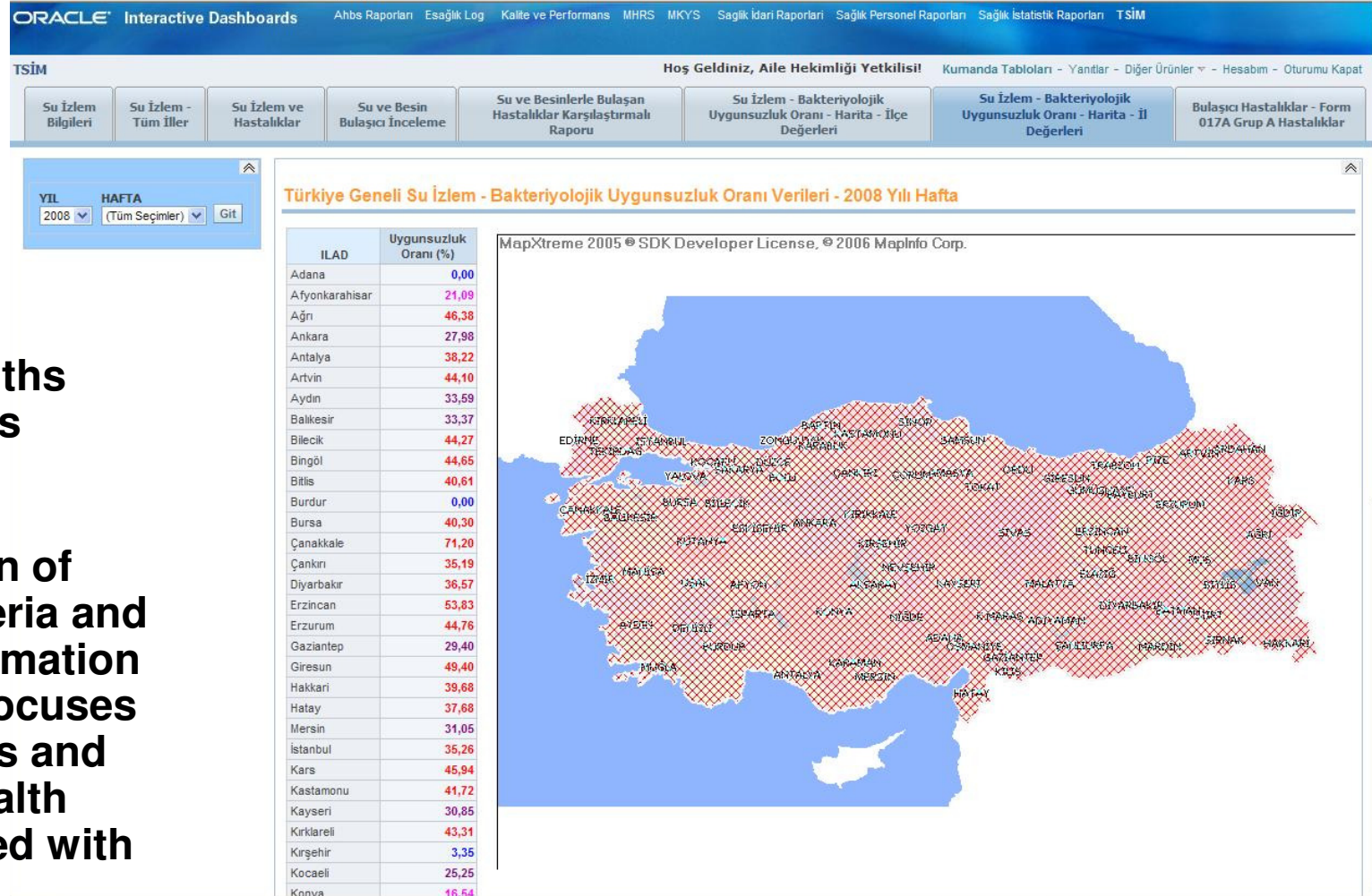


## Human Resources Management System

Distribution of medical experts in Turkey based on the cities and regions, based their expertise and demand.



# Basic Health Statistics System



## Basic Healths Statistics

Distribution of common bacteria and diseases information nationwide. Focuses on epidemics and special health concerns related with water

# National Family Doctors Information System



## National Family Doctors Information System

Allocations and reports are made based on OIBEE system for over 5 millions patients. Over 10K of doctors enter the system and follow their own patients.



# National Family Doctors Information System



MUAYENE (HASTALIKLAR) Hoş Geldiniz, AYŞE GÜL AVCI! Kumanda Tabloları -- Diğer Ürünler -- Hesabım - Oturumu Kapat

FORM18A Sık Görülen İlk 10 Tanı Genel Tanı Raporu Muayene Yapılmayanların Cinsiyet ve Yaş Gruplarına Göre Dağılımı Muayene İşlemleri Muayene Sayılarının Yaş ve Cinsiyete Göre Dağılımı Muayene Bilgileri Hekimin Hastalarının Muayene Sayıları Hekim Muayene Sayıları Muayene Sayılarının Sosyal Güvenlik Kurumuna Göre Dağılımı

YIL AY HEKİM\_IL  
2009 10 DENİZLİ Git

YIL AY HEKİM\_IL  
2009 10 DENİZLİ

ICD_KODU	ICD_ADI	ICD_KOD2	ICD_AD2	01	02	03	05	06	07	08	09	12	13	14	15	16	17	19	20	21	22	23	24	25	26	27	28	29	30		
A08	Viral ve diğer tanımlanmış barsak enfeksiyonları	A08.5	Barsak enfeksiyonları diğer, tanımlanmış	9	6			3	1	2		8	2	4	1	4	5		3	2		3	5				1		2		
		A08.4	Viral barsak enfeksiyonu, tanımlanmamış		1							1		2	1	1	1				1										
		A08.3	Viral enteritler, diğer					3	2	2	1		1	1	1	1	1					1						1		1	
B01	Varisella [su çiçeği]	B01.9	Varisella, komplikasyonsuz		2		9	5	1	4	1	8	1	1	3	1				9	2	5	4	3		10	7	3	8		
		B01.8	Varisella, diğer komplikasyonlarla birlikte																			1						2			
D50	Demir eksikliği anemisi	D50.9	Demir eksikliği anemisi, tanımlanmamış	87	78		123	107	81	118	99	130	86	87	108	111	1	103	74	95	96	97				99	84	60	1	113	
		D50.8	Demir eksikliği anemileri, diğer	58	48		71	62	68	47	49	73	44	45	36	41				56	43	36	40	48			57	45	22	3	53
D56	Talasemiler	D56.8	Talasemiler, diğer	1				1						1	1																
		D56.9	Talasemi, tanımlanmamış	1																	1										
D58	Kalıtsal diğer hemolitik anemiler	D58.2	Hemoglobinopatiler, diğer												1																
		E01.2	İyot eksikliğine bağlı (endemik) guatr, tanımlanmamış							1	1		1	1	2						1						2				
E01	Tiroid bezi bozuklukları ve benzer durumlar, iyot eksikliğine bağlı	E01.1	İyot eksikliğine bağlı multinodüler (endemik) guatr									1														1					
		E03.9	Hipotiroidizm, tanımlanmamış	32	37		48	34	45	37	48	38	45	39	47	37				40	47	42	25	24			56	36	22	37	
E03	Hipotiroidizm, diğer	E03.8	Hipotiroidizm tanımlanmış, diğer	9	17		19	13	8	10	9	9	13	10	10	16				10	12	12	13	12			15	12	6	12	
		E03.1	Konjenital hipotiroidizm, guatrsız		2																	2		1							
		E03.0	Konjenital hipotiroidizm, diffüz guatrın eşlik ettiği		1						1																				
		E03.3	Hipotiroidizm, enfeksiyon sonrası								1	1			1					1	3								1		
		E03.2	Hipotiroidizm, ilaçlara ve diğer eksojen maddelere bağlı gelişen								1	2		1	2			1					1	1	1				1		
E04	Toksik olmayan guatr, diğer	E04.2	Toksik olmayan multinodüler guatr	2											2						1							1			
		E04.0	Toksik olmayan diffüz guatr	2	4		2	10	3	4	2	3	2	2	2	2	1			6	5	2	3	1			4	2	1	5	
		E04.9	Toksik olmayan guatr, tanımlanmamış	21	25		21	15	12	16	15	19	19	11	17	22				15	23	18	21	23			25	20	8	34	
		E04.8	Toksik olmayan guatr tanımlanmış, diğer		5		5	4	9	6	5	7	7	12	2	6				8	5	2	5	4			6	3	5	6	
		E05.8	Tirotoksikozlar, diğer	2	3		1	3	1	1	3	3	2	2	3	1				4	2	2	3	4			3	4	1	1	2
E05.0	Tirotoksikoz, diffüz guatrli	3	4		1	2	1	1	1	1	2	2	2	1					1	1	1	2			2	1	2				
E05.9	Tirotoksikoz tanımlanmamış	6	9		15	6	13	12	8	17	8	4	3	6				14	12	4	8	5			14	5	2	7			

National Family Doctors Information System

Diagnosis and statistics of major diseases nationwide, and their distributions. Special focus on Cancer related diseases.



# Centralized Inventory Management System

Ahbs Raporları MKYS Sağlık Personel Raporları Sağlık İstatistik Raporları TSİM

Hoş Geldiniz, AYŞE GÜL AVCI! Kumanda Tabloları -- Diğer Ürünler -- Hesabım -- Oturumu Kapat

MKYS

**Fiyat**  
Arasında  ve

**İli**  
 ADIY, ...

**Kurum Adı**

**Taahhüt Kodu**

**Malzeme Tanımı**

**Etken Madde**

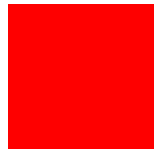
**Stok Fazlası Durumu**

**Toplamlar**

Taahhüt Grup Kodu	Malzeme Grup Tanımı	Miktar	Toplam Tutar	Stok	Stok Tutarı	Stok Fazlası	Stok Fazlası Tutarı
150-03-01	İLAÇLAR VE FARMAKOLOJİK ÜRÜNLER	151.325.805	253.361.336,29	87.154.914	143.104.574,90	40.341.342	64.489.310,73
150-03-02	BIYOKİMYASALLAR VE GAZ MADDELERİ İÇEREN KİMYASALLAR	1.594.913	1.115.894,53	1.292.770	711.442,58	795.375	348.781,49
150-03-03	MEDİKAL MALZEMELER	521.999.270	403.129.148,71	315.871.850	254.163.120,27	138.025.276	134.149.353,43
150-03-04	LABORATUVAR MALZEMELERİ	81.684.980	63.780.350,18	45.480.205	33.327.672,27	19.901.932	15.332.334,92
<b>Genel Toplam</b>		<b>756.604.968</b>	<b>721.386.729,72</b>	<b>449.799.740</b>	<b>431.306.810,02</b>	<b>199.063.926</b>	<b>214.319.780,57</b>

**Stok Fazlası Sonuçları**

Taahhüt Kodu	Malzeme Tanımı	Etken Madde	Fiyat	Miktar	Toplam Tutar	Stok	Stok Tutarı	Yıllık İhtiyaç	Azami Stok Miktarı	Stok Fazlası	Stok Fazlası Tutarı	Kurum Adı
150-03-01	İLAÇLAR VE FARMAKOLOJİK ÜRÜNLER		0,00	1.000	0,00	1.000	0,00	700	175	825	0,00	BURSA YENİŞEHİR DEVLET HASTANESİ
150-03-01	İLAÇLAR VE FARMAKOLOJİK ÜRÜNLER		0,01	71.280	712,80	71.280	712,80	76680	6390	64.890	648,90	SAKARYA SAĞLIK MÜDÜRLÜĞÜ
150-03-01	İLAÇLAR VE FARMAKOLOJİK ÜRÜNLER		0,02	750	15,00	450	9,00	800	200	250	5,00	ADANA PROF.DR.NUSRET KARASU GÖĞÜS HASTALIKLARI HASTANESİ
150-03-01	İLAÇLAR VE FARMAKOLOJİK ÜRÜNLER		0,02	370	7,40	325	6,50	1000	250	75	1,50	ÇANAKKALE GELİBOLU DEVLET HASTANESİ



# Questions

