V Jornadas Ibéricas de Infraestruturas de Dados Espaciais

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Intergraph SMART Solutions
Carlos Laiginhas
Intergraph helps the world work smarter.

Our software and solutions improve the lives of millions of people through better facilities, safer communities, and more reliable operations.

Intergraph is part of Hexagon.
Smart solutions

Intergraph Security, Government & Infrastructure (SG&I) is the leader in **smart solutions** for emergency response, utilities, transportation, and other global challenges.

Our smart solutions are built upon:

- **Asset and incident management** for industry-specific challenges
- **Geospatial** data creation, visualization, processing, and management
- Data and system **integration and interoperability**
- **Analytics** for improving current and future operations

Smart solutions lead to **smarter decisions** and better results.
Hexagon’s Divisions

**Metrology**
Shaping change through accuracy, precision, and improvements in manufacturing processes

**Geosystems**
Shaping change through a better understanding of the world around us

**Technology**
Shaping change through engineering and geospatial technologies

- **31% of Hexagon**
  - Stationary and portable industrial metrology systems

- **34% of Hexagon**
  - Measurement and positioning systems used mainly in the development and protection of infrastructure

- **35% of Hexagon**
  - Enterprise software for design, engineering and managing data critical to physical plant assets
  - Geospatially powered software for the management and visualization of vast amounts of location-based data
SMART Solutions Concept
SMART Solutions Concept

• Addressed for wisely operated and managed orgs.
  – Well balanced model of investments in human and physical resources;
  – Social and environmental responsibilities;
  – Integrated information and communication technologies:
  – Empower sustainability and efficiency;
  – Assure high quality of results and wide participation and engagement.

• Integrated approach of various components working together:
  – Shared vision, common objectives;
  – Diverse players, one single coordination overall;
  – Specific fields of action, but by means of sharing;
  – Empowering productivity, efficiency and competitiveness;
  – Improving knowledge and management tools within the organization.

• Solutions based in wise, shared and collaborative actions, each contributing with partial contributions, valuable to all.
SMART Solutions Context
• The Hexagon Group, new partnerships and synergies:
  – **Geosystems Division**: Location and surveillance solutions;
  – **Metrology Division**: Sensors and risk monitoring solutions.

• Challenging evolution from SDI to solutions capable of responding to critical and business related essential needs;

• From Intergraph SDI platform, adding integrated branches to complementary domains like:
  – Emergency planning and response, Critical assets management and Security surveillance;
  – Infrastructures management and public works monitoring;
  – Environmental and energetic improvements.

• **SMART Solutions**, developed and explored in a tailored fashion addressing several business needs and scopes.
SMART H₂O Solution

Water Infrastructure Management

Multi-Agency Coordination

Warning Systems

Emergency Response

Critical Assets Protection

Reducing Risk of Failure

Disaster Safeguard
SMART Agriculture Solutions

Agribusiness Management

Planning and Geoprocessing

Integrated Fleet Management

Increase Productivity

Precision Auto Piloting

Remote monitoring

Process Planning
- Topography and plot design
- Harvesting planning
- Auto-generation of autopilot lines

MIS Integration
- Integration with product planning
- Integration with external systems
- Historical reporting and analysis

Agriculture Data Warehouse

Process Execution
- Loading line to the autopilot
- Digital analysis of soil variables
- Variable rate application

Process Control
- Productivity control
- Aerial survey with drones
- Image analysis of crops

Reduce Waste
EDMONTON: SMART CITY

Edmonton is a smart city.

Home to more than one million people, Edmonton is Canada’s cultural capital and a hub for commerce and natural resources industries. Edmonton is also a leader in the use of innovation to improve municipal services, from public safety to public works to transit.

With the help of Intergraph, Edmonton manages the demands of a growing population and a thriving economy, making smart decisions that improve the quality of life for its residents.

Read more in Perspectives magazine.
Management & Administration

Critical Infrastr. Protection

Security and Surveillance

Support Services

Maintenance Management

Production Enhancement

Emergency Response

Mobility & Tracking

Environmental Sustainability
Questions?