Team Côte d’Azur is the public funded agency for the High Tech economic development of the Côte d’Azur

Created in 1984

GPS coordinates:

Tom Tom:
43 40 09 N / 7 13 13 E

Google Earth :
43 40 08.80 N / 7 13 14.30 E
More than 200 SMEs, second R&D spending in Aerospace & Defense sector
3 pilots schools

8 worldwide principal dealers: Thales Alenia Space, Eurocopter, Dassault, Safran, Thales Underwater Systems, DCN ...

30 000 civil jobs
45 000 military jobs

The regional scope: the Provence Alpes Côte d’Azur region
The Sophia Antipolis Techno Park

2,360 hectares
30,000 jobs
1,300 companies

The first techno parc in Europe
Sophia Antipolis: what’s next?

The takeoff took place in the 80’s

1971: 46 ha

1990: 652 ha

Number of companies

Number of jobs

0 5000 10000 15000 20000 25000 30000 35000

0 200 400 600 800 1000 1200 1400


Nombre d'entreprises Nombre d'emplois
With 30,000 jobs, Sophia-Antipolis is now the first high tech parc in Europe with Kista, Stockholm (Saclay, situated in the south of Paris is not a parc).

40% of Sophia-Antipolis based cies have an R&D activity

Sophia-Antipolis was home to 33% of foreign R&D jobs coming to France for the year 2006 (AFII, conference 28/02/07)
The new economic challenges for staying an « High Tech » area…

For a new ambitious positioning of the french riviera in an European framework

**National and regional scopes**

(clusters and french « pôles de compétitivité »)

**Public regional policy:**

Higher specialisation of regional economy and public private partnership - PPP

**European funded programs** (FP6/FP7, Interreg, Eureka …)

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High tech activities rapidly evolving

New human competencies and new jobs required

Regional Strengthes & Weaknesses
Emergence of a new sector of activity linked to SatApps
Brief history, a long way …

In 2004

In 2005

In 2006

The launch of a strategic study by the public bodies

In 2007

Galileo is being prepared on the Côte d’Azur too …
From GPS to Galileo: markets and applications

**Market segments**

- **LBS**
  - Applications: Information & navigation, emergency assistance, mobile payments

- **Road**
  - Applications: Guiding, fleet management, info traffic, road toll, emergency calls

- **Aviation**
  - Applications: Ground assistance operations, takeoffs, route planning, guided approaches

- **Rail**
  - Applications: Signalisation, traffic management, civil engineering, passengers info

- **Maritim**
  - Applications: Maritim & river navigation, traffic management, harbors operations, search & rescue

- **Security**
  - Applications: Law conformity, borders surveillance, peacekeeping operations, homeland security

- **Professional**
  - Applications: Agriculture, off-shore, fishing, networks synchronisation, banks & insurances
A large spectrum of all types of players in the value chain…
Eco system of Satnav applications

A techno environment complex to overcome ...

GIS

Map tools

Telecom networks

Satellite Navigation

Captors / sensors

Date Bases

Cryptography Algorithms

... and large needs for global standardisation
Development of applications with a « contractual » commitment on performances:
- availability,
- reliability,
- precision,
- coverage…

A “new world “ with EGNOS and Galileo

SatNav infrastructures

Signal in Space
GPS

Yesterday

Applications using SatNav signals

Receivers & Terminals

Signal in Space
EGNOS / Galileo

From now (evolving)

1/ Applications – military signal (M code):
• Access limited to a dedicated signal
• National agreements

2/ Applications – open signal (C/A code):
• No guarantee of availability
• No guarantee of performance

1/ Applications – open signal:
• Simple positioning

2/ Applications – other signals (security incl.):
• Levels of guarantees
From Telecom
To Sat applications …
# Technological challenges: to the convergence of telecom solutions to satellite applications

## Navigation (Egnos / Galileo)
- **All types of info**
  - Voice + Image + Video
  - Navigation + Cartography...
- **Everywhere**
  - Without limits
  - Indoor / Outdoor

## Earth Observation (GMES)
- **All tools**
  - PC+PND+...
  - GSM + GPRS
  - GPS + EGNOS + Galileo
- **Every time**
  - On the move, on stand by
  - In real time or not

## ITC
- Opportunities of new added value services
- A strong ambition and strong assets in the Provence Côte d’Azur region

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**Real wish to develop standards and regulations at the European level**
The telecom sector is driven by services
- SatNav functionalities will bring a new dimension to services

Trends in ICT:
- Components even more generic
- Software even more complex
  - Hardware-HW has to be more generic to be polyvalent (independent from technologies)
  - Software-SW becomes more and more complex to implement flexibilities on hardware

HW and SW teams of high quality to meet these challenges
### Key technologies in SatNav and Telecom

(source Ernst & Young and Thales Alenia Space)

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<th>TECHNOS CŒUR SATNAV</th>
<th>IMPORTANCE DE LA TECHNO DANS LES TELECOMS</th>
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### TECHNOS IMPORTANTES SATNAV

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Key technologies (100) were issued by the french Ministry of Industry
Functional segmentation of a Satnav application

- Regional existing competencies
- Regional competencies to be developed

Data Basis

Supervision Exploitation

User Terminal

Applicative layers

GNSS receivers

Telecom interfaces

Hybridisation tools

Cartography GIS/HMI

Satellite WIFI WIMAX SMS GPRS UMTS ...

Navigation Satellites
An approach on techno competencies and Human Ressources

An new ambitious positioning

Regional assets
- Technologies / players / « pôles de Compétitivité »: ITC and Aerospace & Defense sector
- Education / public and private R&D
- Sophia Antipolis’ model to be extended
- Industries / Technos/ Services

The new IT Reconversion
- Techno competencies
  - Networks
  - Mobile telecoms
  - Applications
  - Micro-electronics
  - Software

- HR competencies
  - Qualified international ressources/staff
  - Experienced senior execs
  - Flexibles employees and competitive wages

Opportunities
- Galileo – GMES
- French Pôles de Compétitivité and labelled projects
- European and national visibility
- Collaborative projects and networks
- Development of new markets

Satellite Navigation Applications Market
New « reconversion and redeployment » facilitated on new technologies
A large demo show room to be launched

- **A place for valorization** of expertises & know how
  - Techno place for an efficient networking on competencies & partners & projects & info-knowledge to exchange

- **A place for demos of** products & services to be developed for clients / partners / institutions
  - Show - Room: access to applications in real conditions of uses: user work posts and use of a test zone to demonstrate experimental pre-operational services

- **A space for education & training** and transfers of technologies to users, partners, institutions, etc…
Promotion and animation of this new cluster

Organisation of dedicated workshops:
 at the national and international levels

- To facilitate the matchmaking between the end users needs: prescriptors and brand new innovative solutions

- To make visible the projects and competencies of the cluster, the « pôles de compétitivité » and local players

- To centralise and broadcast information on new opportunities of financing new projects, new partnerships in the different programmes (ITC, GMES, Galileo, National tenders...)

Valorization and promotion of the cluster
-- Opportunity validated on June 2007 --

-- Phase 2 --

Phase 1

Opportunity

Go

Phase 2

Feasibility

Projects

- Working groups: diff. themes, on regional & national levels

2008
Sophia Antipolis at the heart of SatNav applications

The first players
The Côte d’Azur region aims to be one of this future « Top10 club ».

Conclusion / the message:

Galileo will need strong inputs from european regions to maximize the development of the downstream markets … and regions need such programs to develop high tech jobs, visibility and finally value …

The Côte d’Azur region aims to be one of this future « Top10 club ».

Your regional contact point:

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+ 33 613 390 629

Thank you !