



22@BARCELONA, THE INNOVATION DISTRICT



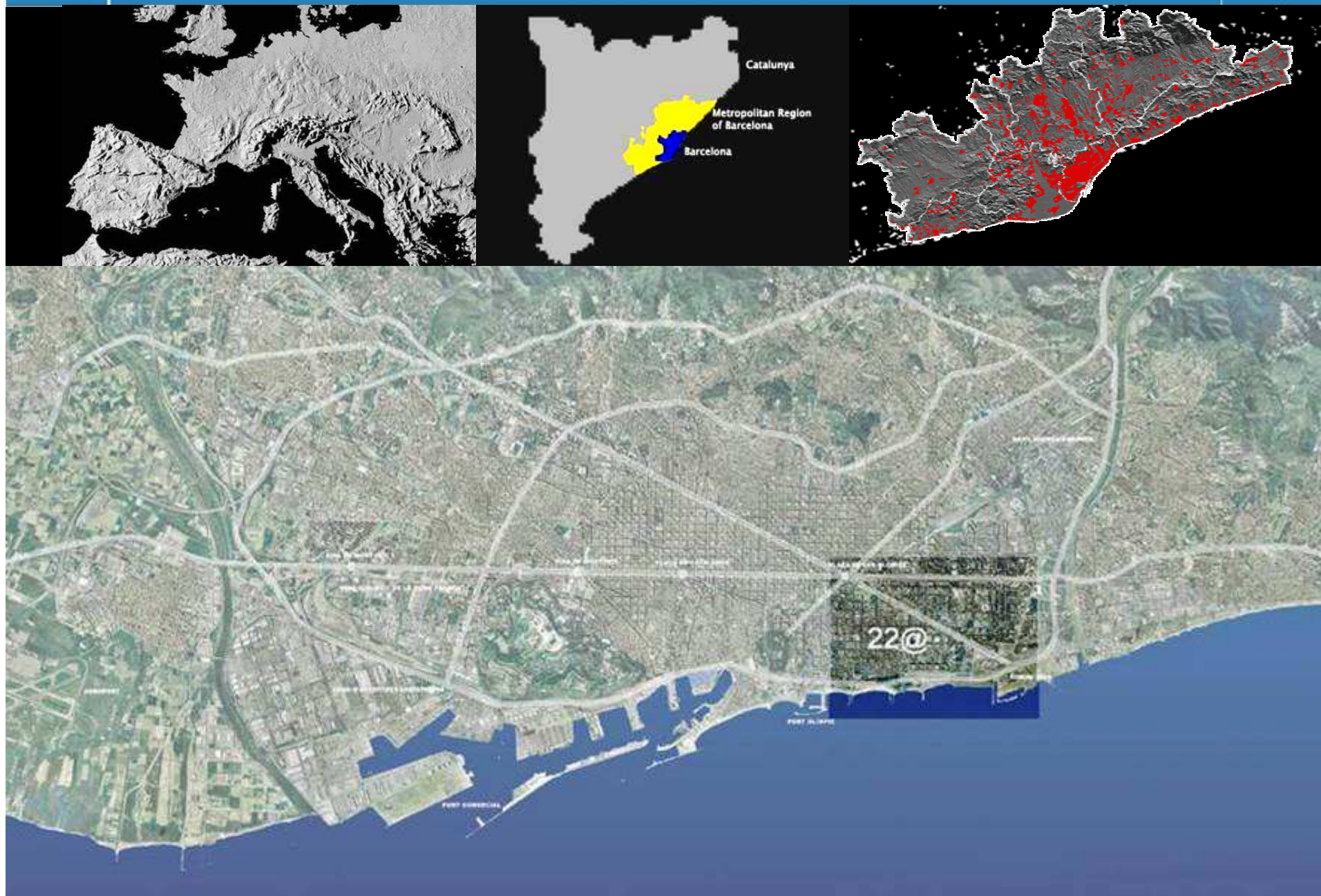
LOCOMOTIVE CONFERENCE

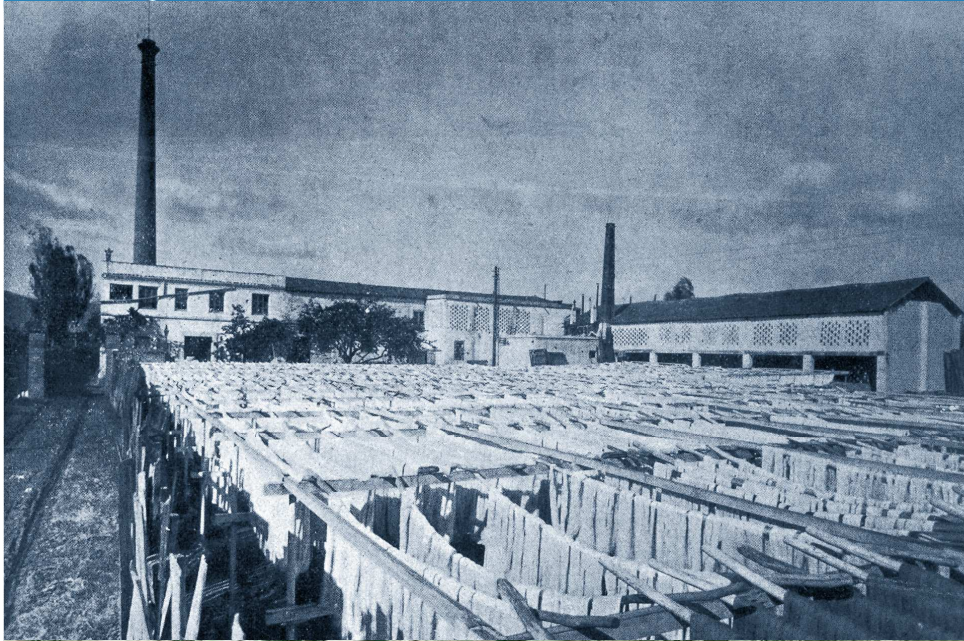
5th-6th June 2007, Hamburg

Sergi Guillot

22@Barcelona



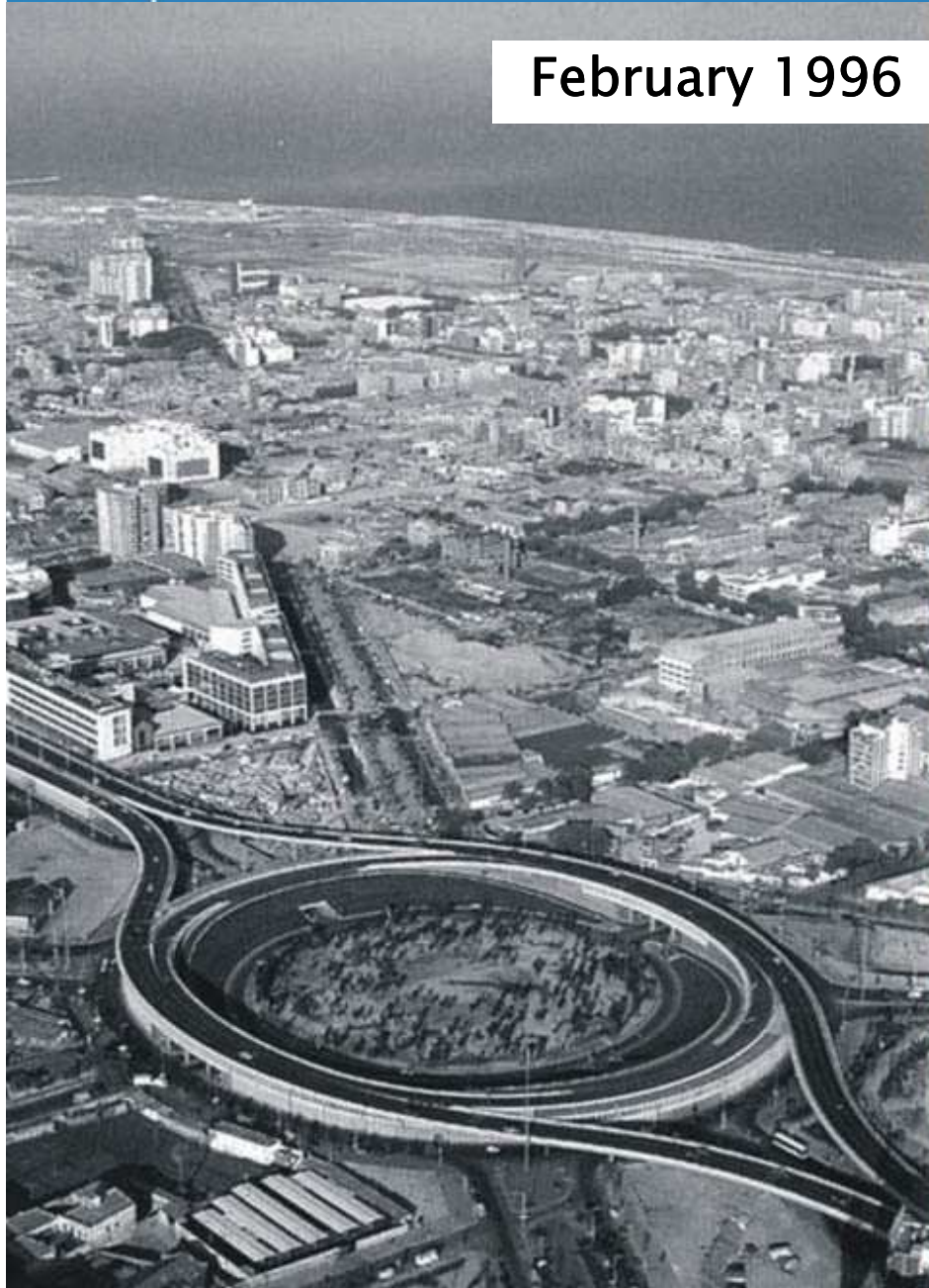




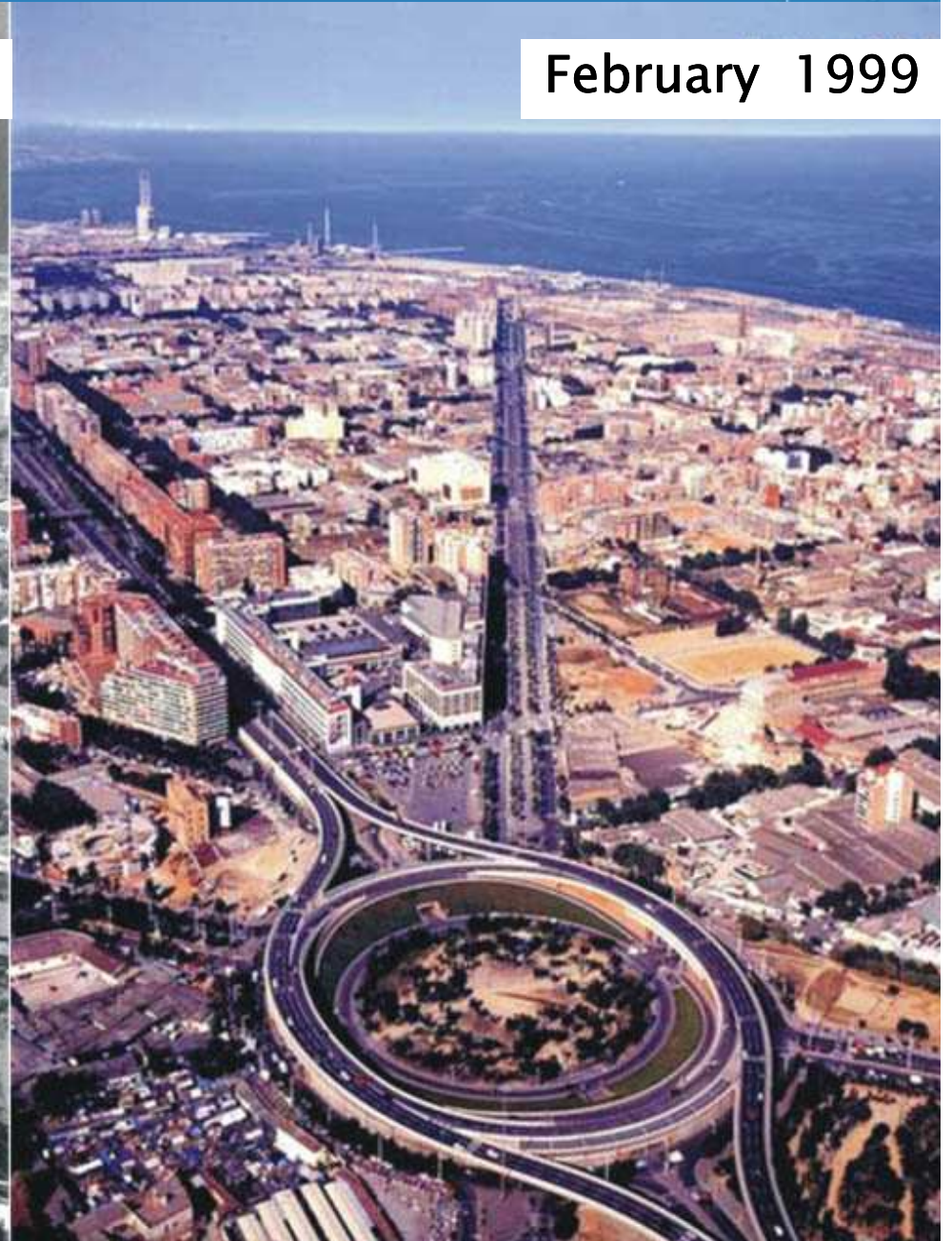




February 1996



February 1999





An urban renovation strategy. A new model of making city
The answer to a necessity: the knowledge economy



2000

Industrial land, little used or in complete disuse, 100% privately owned, and part yet to be urbanised

2001...

Urban Planning

...2003...

Urban Management

...2004...

Infrastructures

...2004/05

Construction

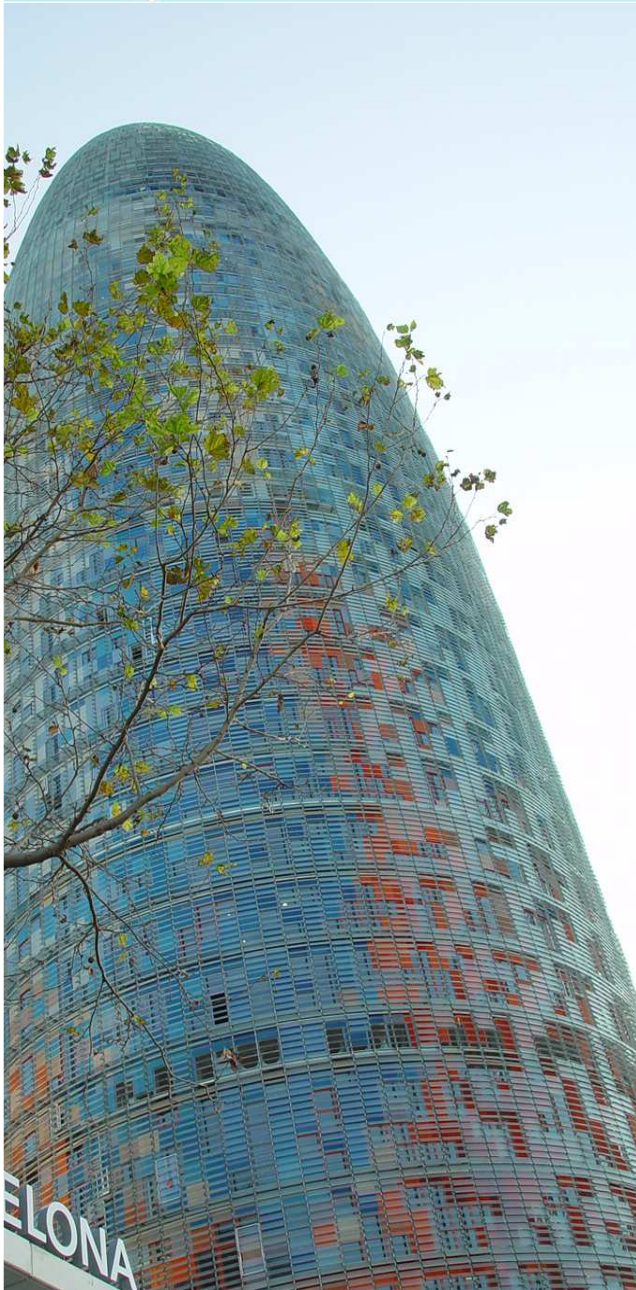
...2004/05

Corporate Projects, clusters

...2006...

Compact city, with publicly owned land, fully urbanised and offering excellent infrastructure, providing many more jobs in the field of knowledge intensive activities



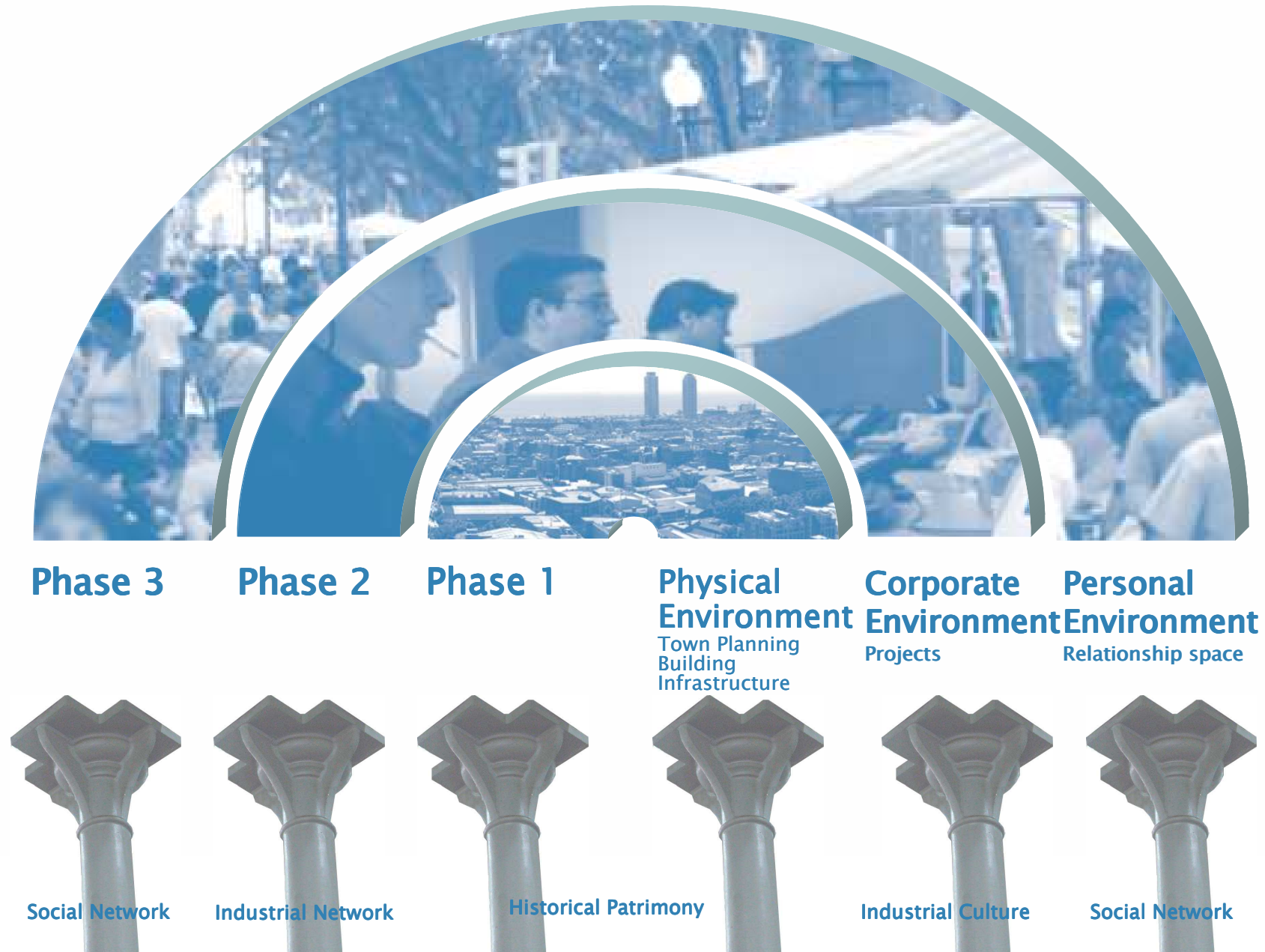


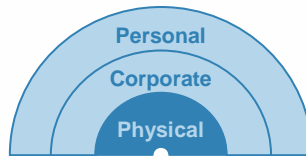
THE SCALE OF THE PROJECT:

- **TERRITORY:** **198,26 Ha** (115 city blocks)
- **NEW GROSS FLOOR SPACE :** **4.000.000 m²**
 - Productive Activities: 3.200.000 m²
 - Housing, facilities and services: 800.000 m²
- **INCREASE IN GREEN SPACES:** **114.000 m²**
- **INCREASE IN FACILITIES:** **145.000 m²**
- **INVESTMENT IN INFRASTRUCTURES:** **180 million €**

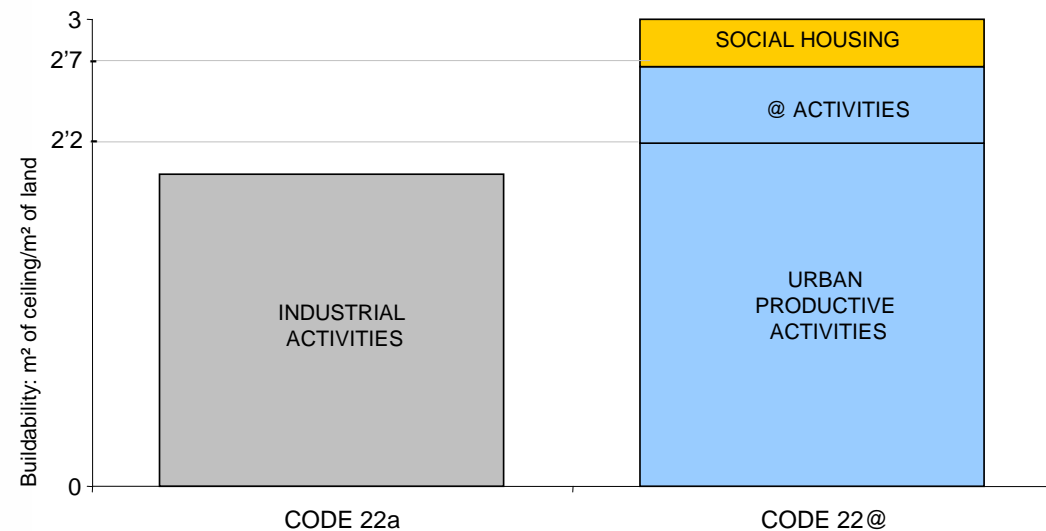
UPDAY EXECUTION 2006:

- **URBAN PLAN AND NEW ECONOMIC CEILING:**
 - Rearrangement of 53% of the territory
 - 811.500 m² of new economic ceiling
 - Near than 300 firms and institutions recently established
- **SPECIAL INFRASTRUCTURE PLAN:**
 - 30% of reurbanization work initiated
 - Investment 2004-2007: 80 million euros





INCREASE DENSITY:



BALANCE PUBLIC AND PRIVATE BENEFITS

PRIVATE BENEFITS

- **More productive uses:**
22a → 22@
- **Higher density:**
2 → 2,2 / 2,7
- **Leading edge infrastructures**

PUBLIC BENEFITS

- **Free cession of land:**
 - 10% for 7@ facilities
 - 10% for social housing
 - 10% for green areas
 - Eventual opening of streets
- **Financing a part of the Special Infrastructure Plan**



@ Activities



Green space



Advanced Infrastructures



Industrial Patrimony



7@ Facilities



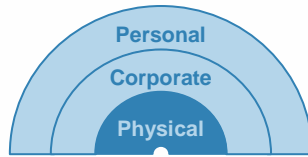
Social Housing



New mobility model



Revitalization public spaces



NEW MOBILITY PLAN



PUBLIC SPACE RENEWAL



NEW ENERGY NETWORK



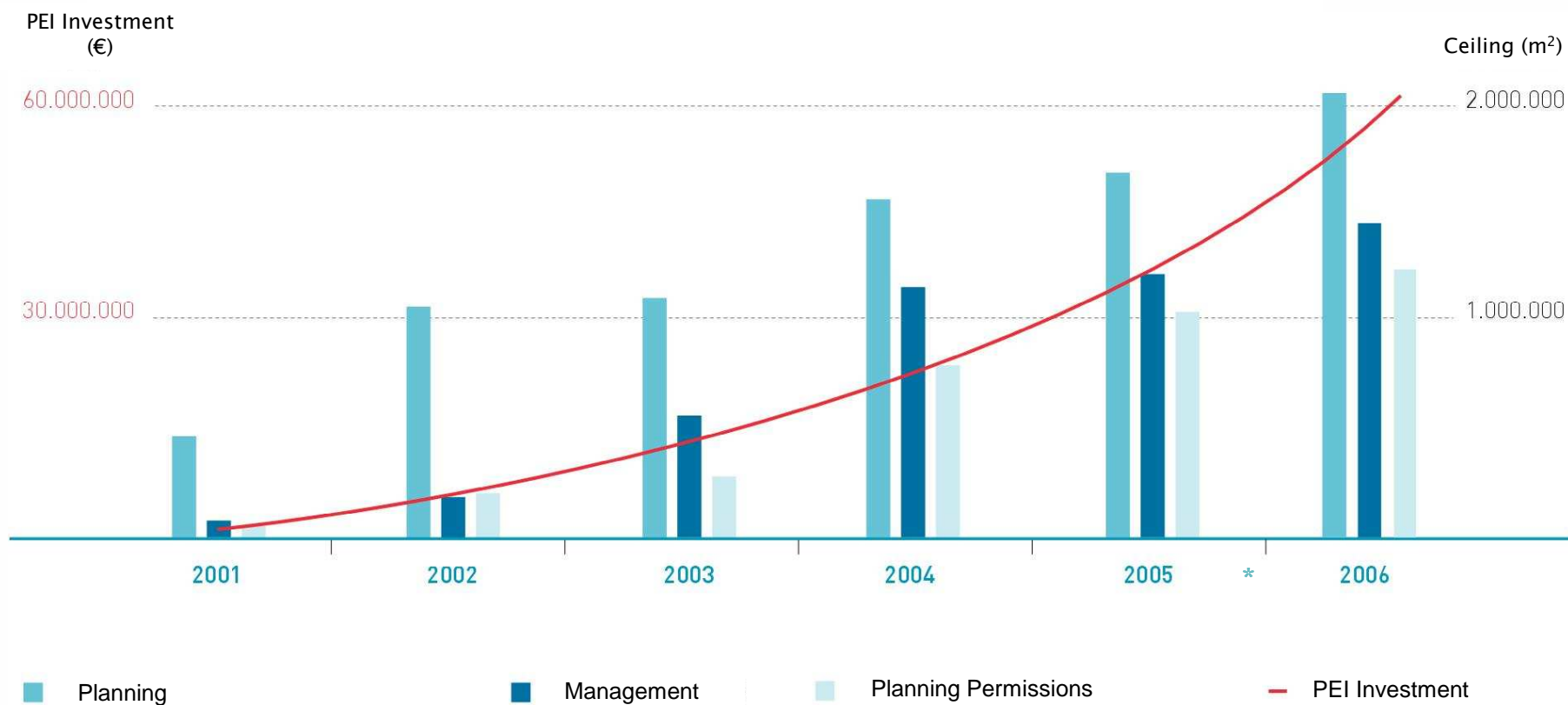
SELECTIVE PNEUMATIC WASTE COLLECTION

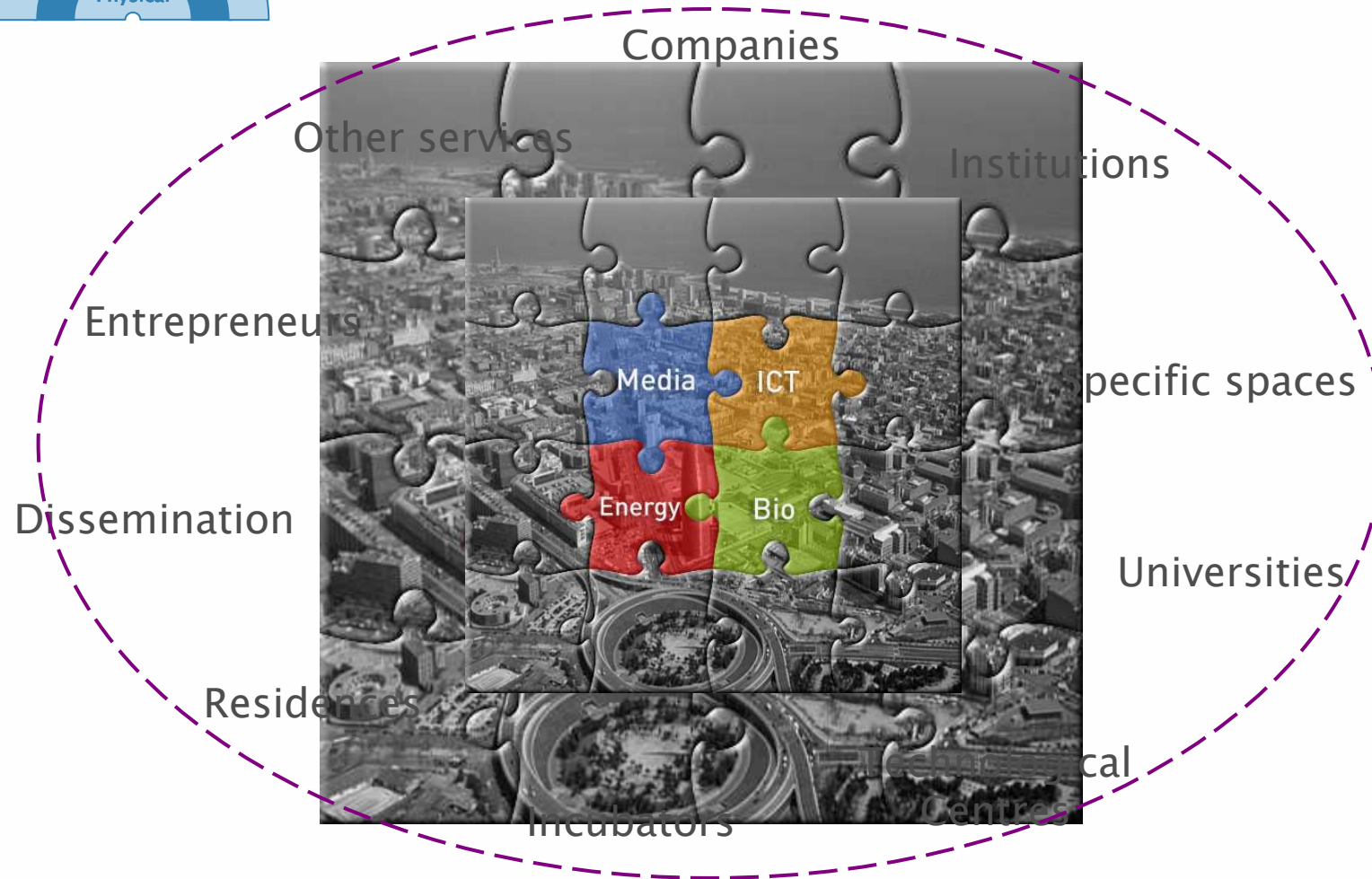


NEW HEATING AND COOLING SYSTEM



UNDERGROUND GALLERIES





Clusters and 22@Barcelona Activities

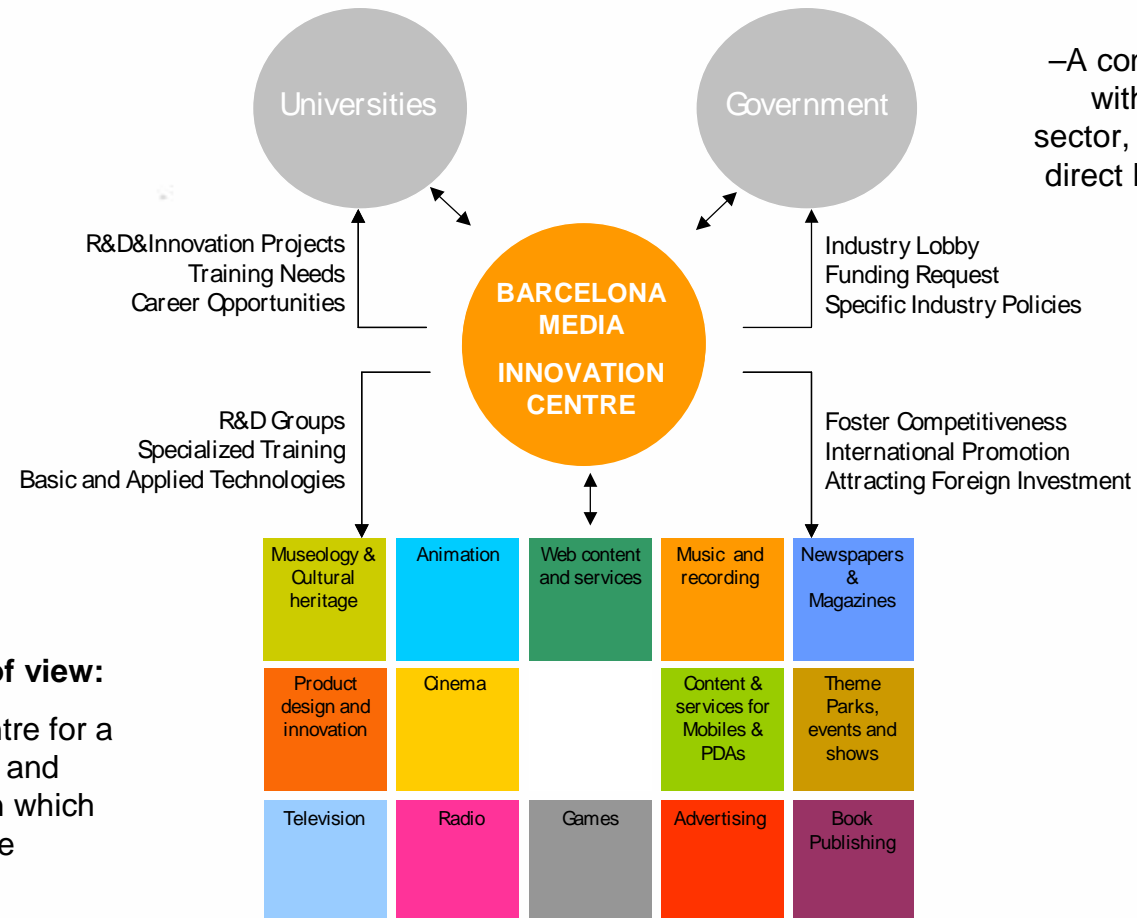


From the university point of view:

–A transfer model for the industrial sector and for all universities and research centres

From the administration point of view:

–A connexion model with the industrial sector, through which direct R+D+i policies



From the industry point of view:

–A model of technology centre for a sector with great relevance and activity in Catalunya, and in which companies need to innovate continuously

–Implements quality research

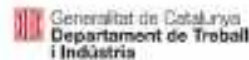
Empresas:

54% representantes de empresas del sector
(contenidos y tecnología)



46% representants de institucions
relacionades con la formació, la
investigació y la innovació

Administracions:



Universidades:





**To Digitalize the internal processes
and reinforce the current IS (ERP, CRM, SCM, RH...)**

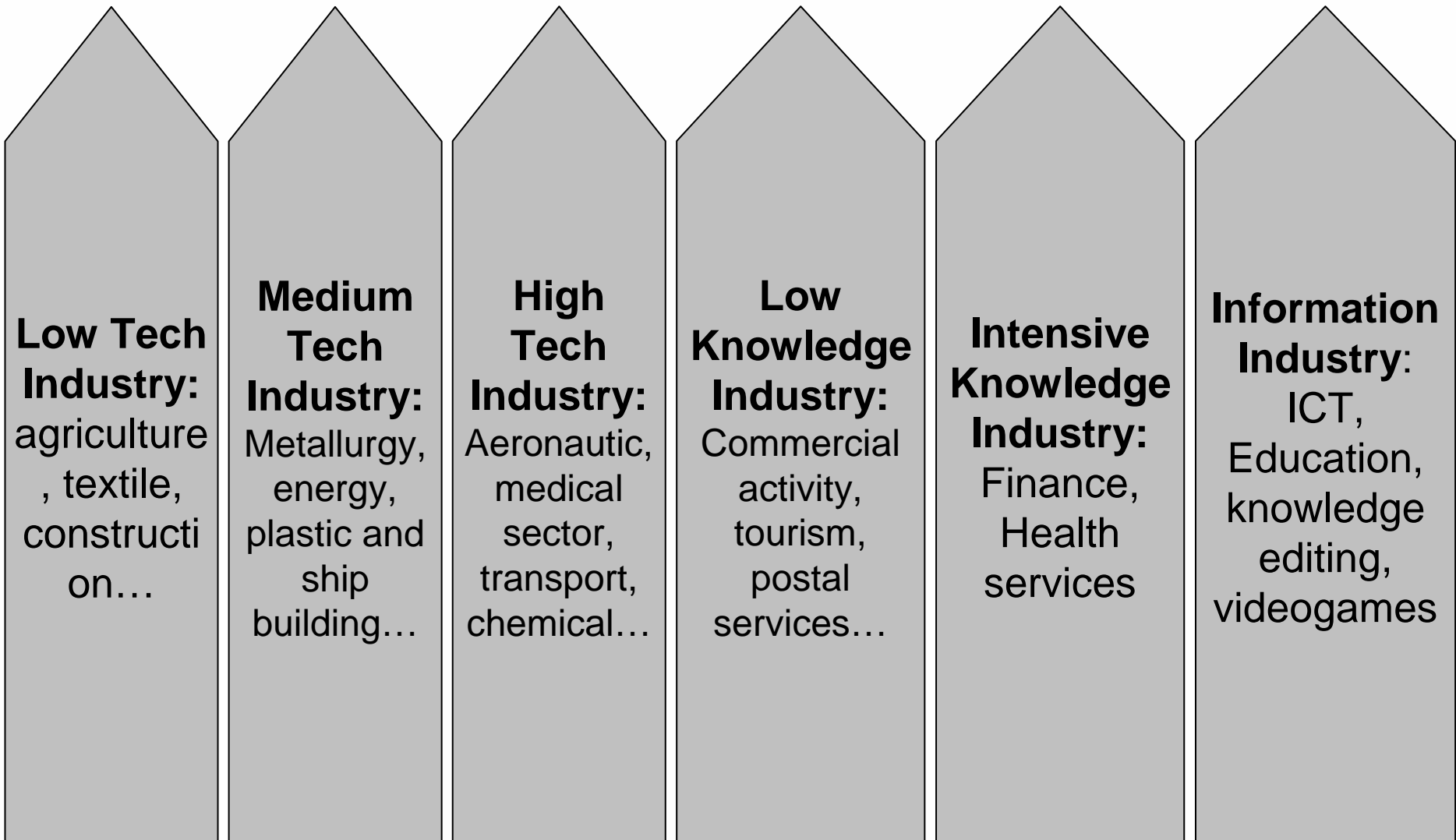
To Secure the networks and the systems
(Identification, Encryption, Anti-virus, Back-up, Fail-over..)

To Outsource and create new collaborating systems
(call center, online supplier selections, auctions, collaboration...)

**To Extend the mobility and profit of the new convergence
possibilities** (click to talk, VoIP, Wi-Fi, 3G, videoconf...)

To Generate revenue exploiting fully the e-business boom
(e-tourism, e-advertisement, e-government, online video...)

To Center the organization around the employee
(BI, AI, E-learning, Data mining, score board...)



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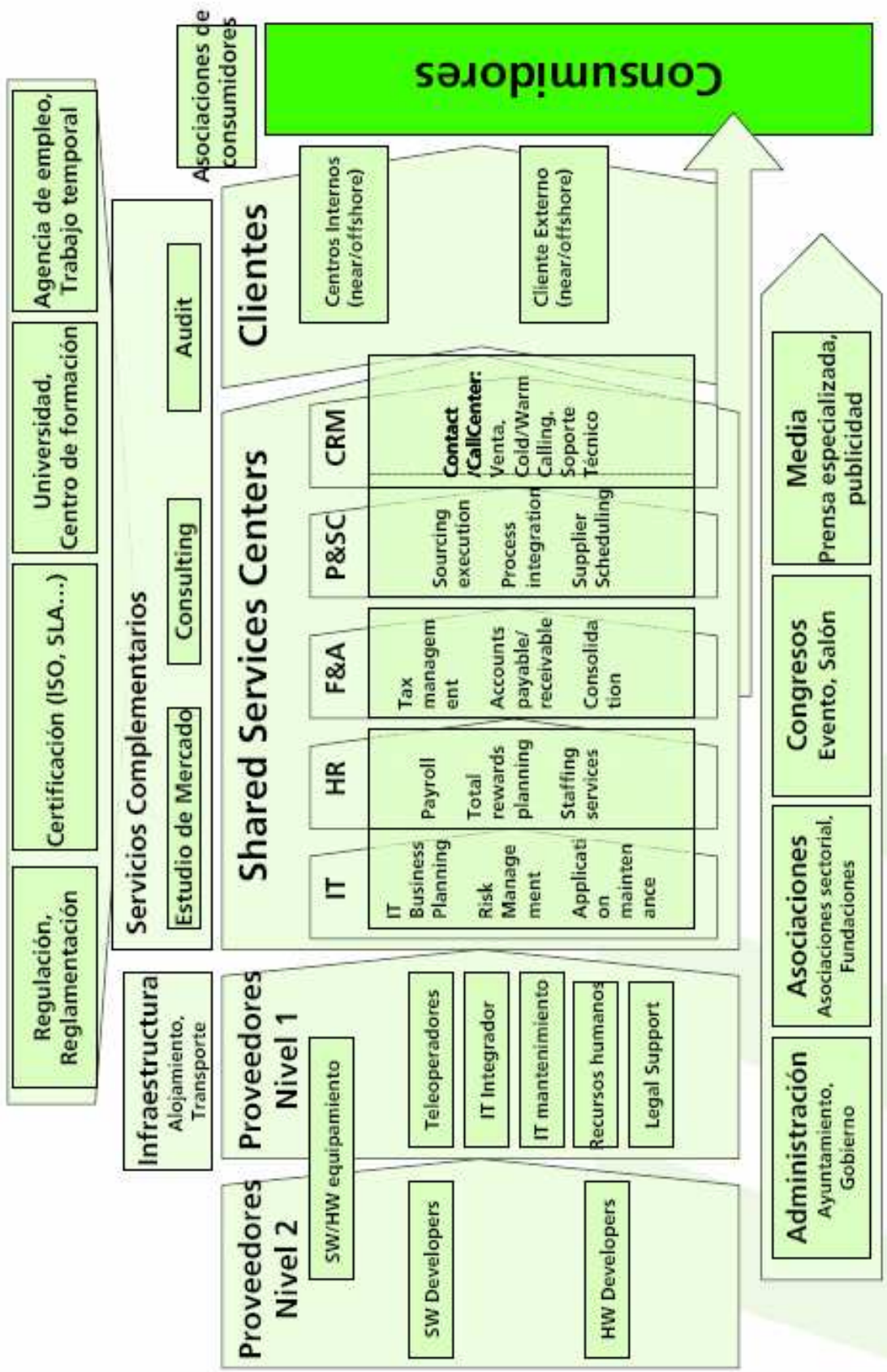
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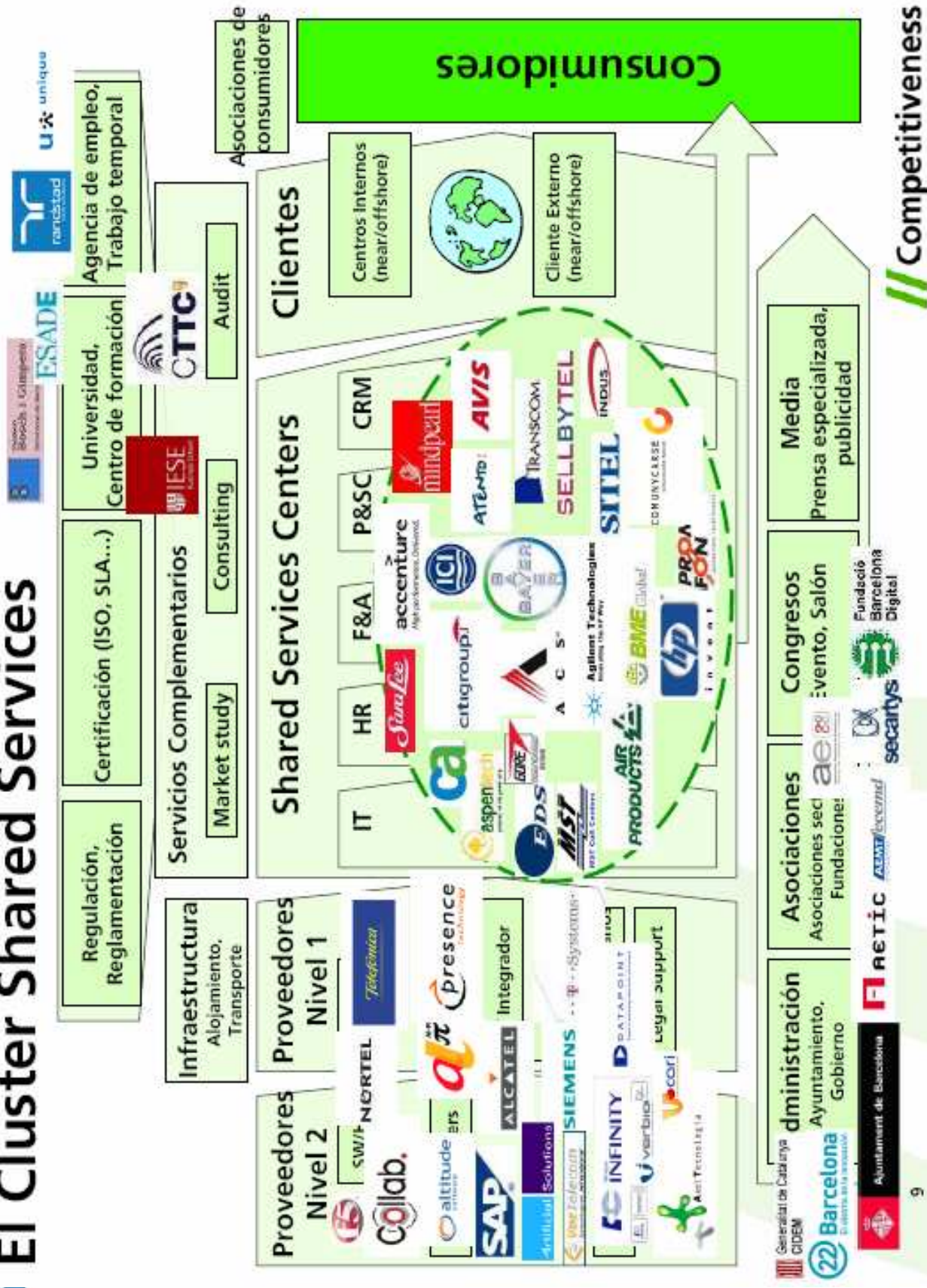
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El Cluster Shared Services

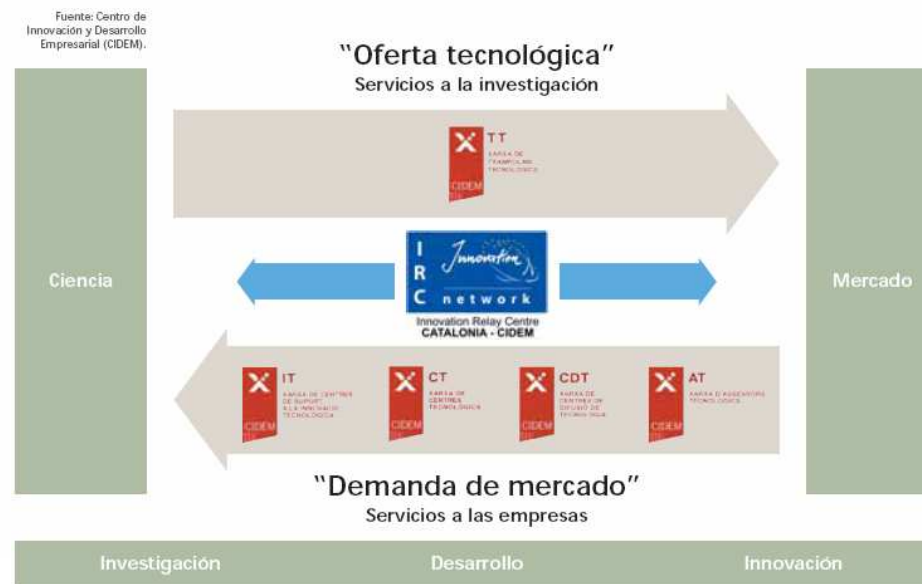


Center ICT

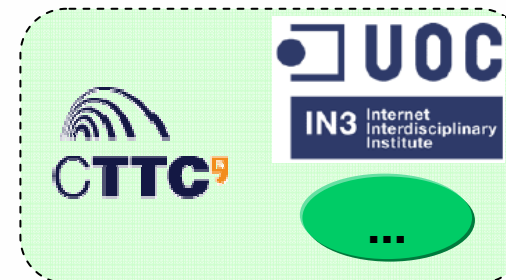


- It belongs to the network of CT of the CIDEM. Its main activity consists of the **transference of the knowledge generated in the private and public centres of research**
- Specialized in a type of technology or sector, with excellence criteria at national and international level
- Mission: to **reinforce the industry of the TIC**
 - Adaptation of products to the necessities of the demand
 - To take advantage of the the Catalan system structures of research and development.

- Its operation:
 - Strategic lines defined
 - Internal and external groups/lines (collaboration in network with other centres) -
 - Network structure: to spread, to sensitize and to detect necessities and demand

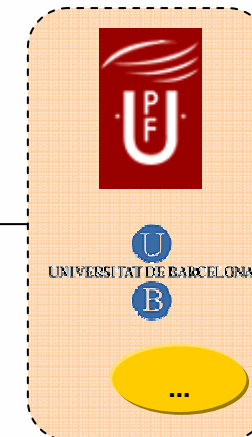
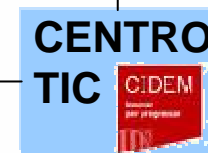
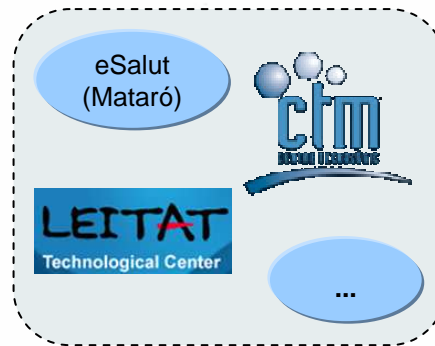


Universities of
reference in
matter TIC



Other related
TC

Public-private
technological
centers



Universities
of reference
in matter
Media

Resources in
R+D of great
TIC companies



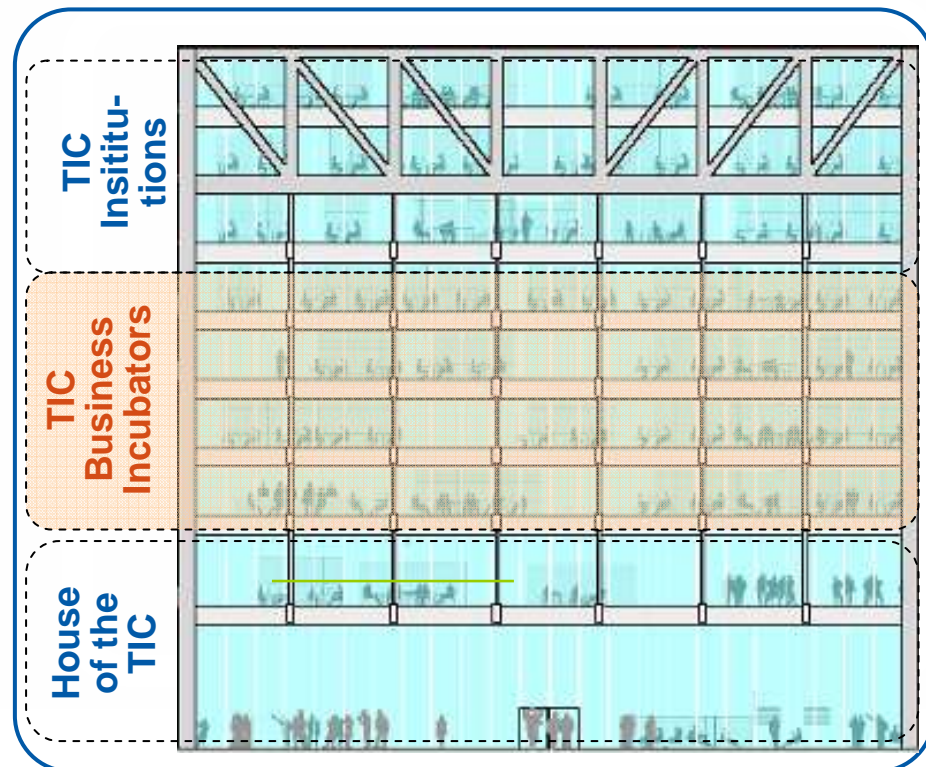
Resources in
R+D of great
Media
companies

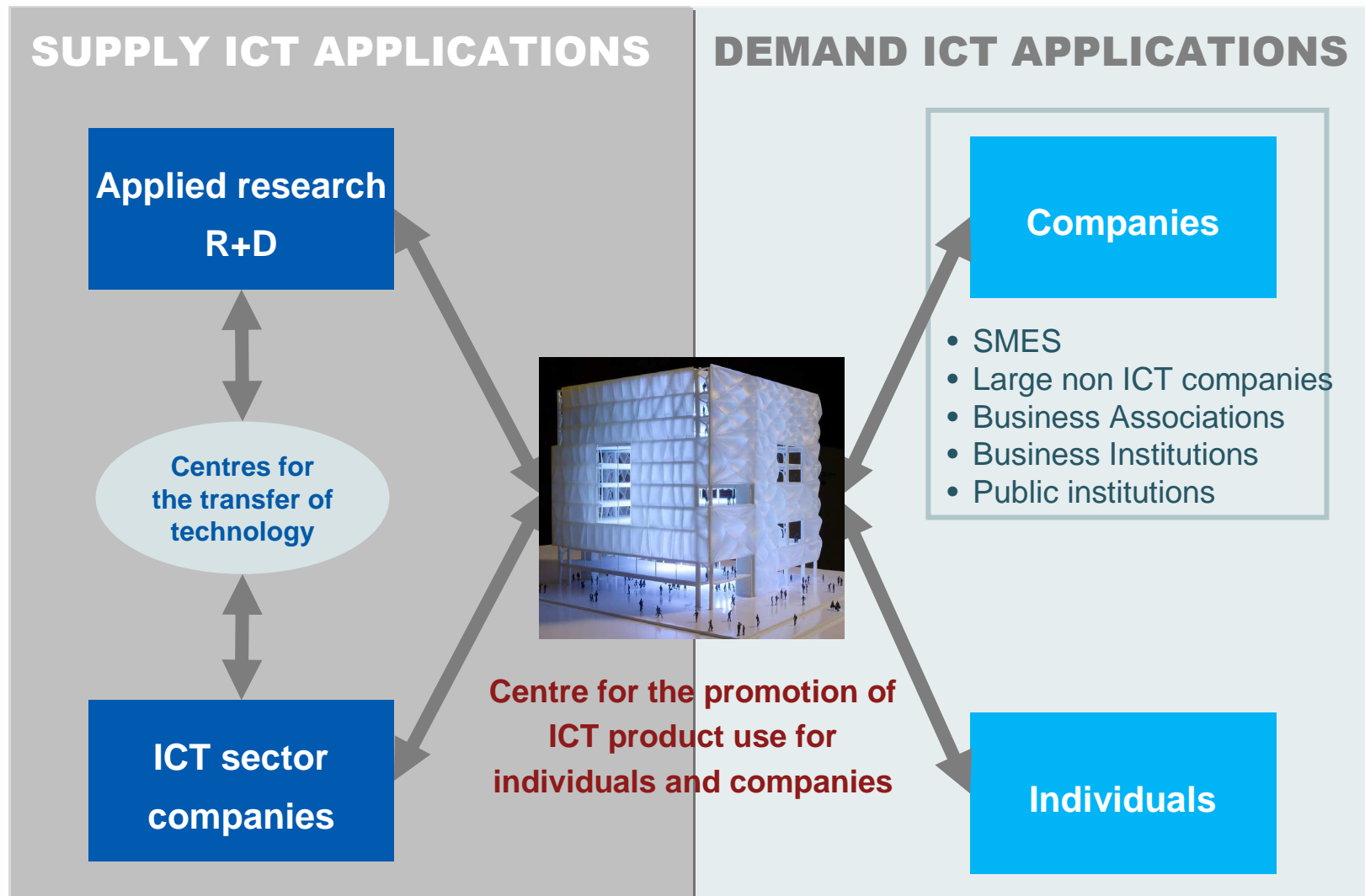


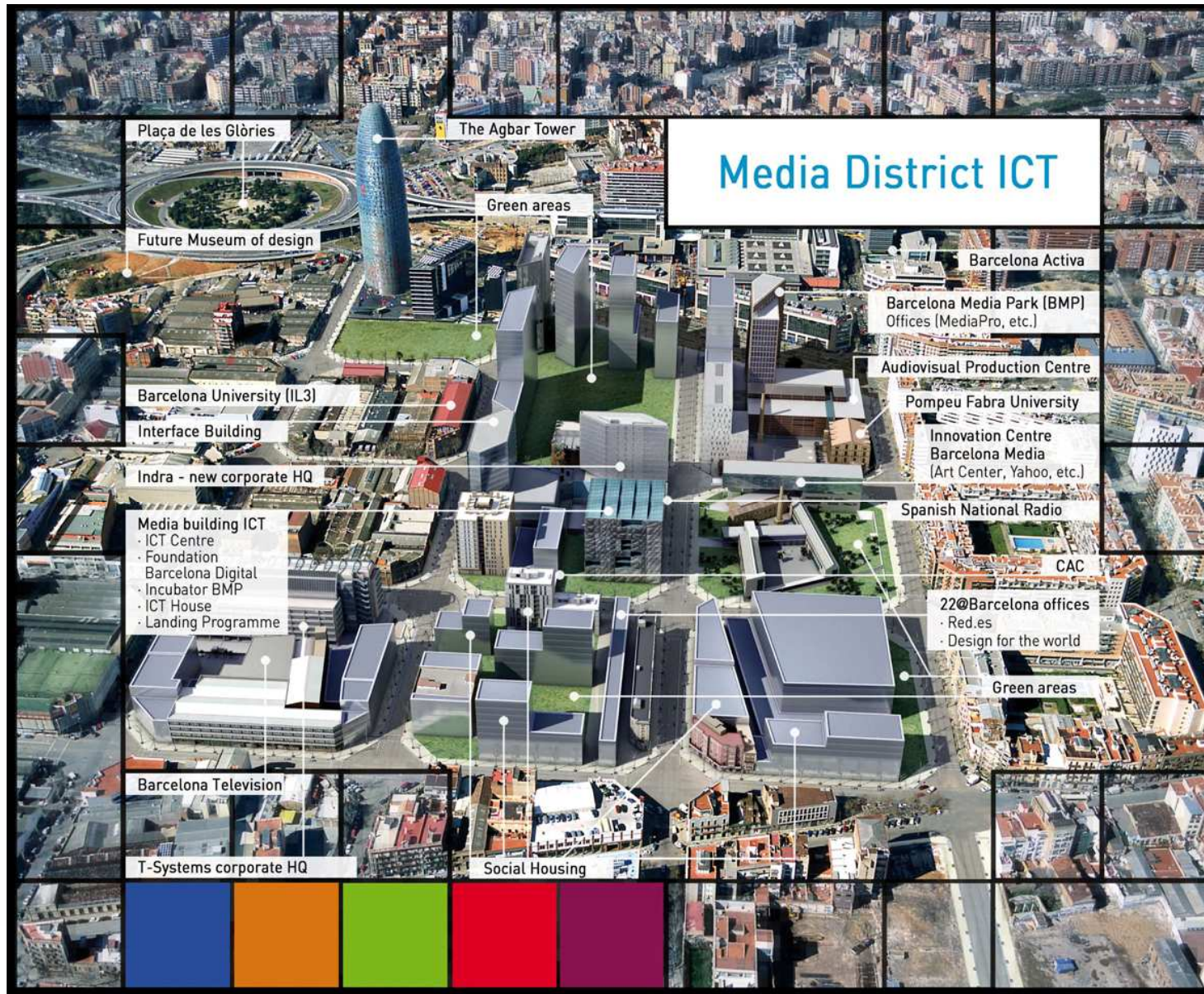
MediaTIC Building

Place of encounter for the Media and TIC community in 22@.

Spaces and services of high value added for new companies and professionals.





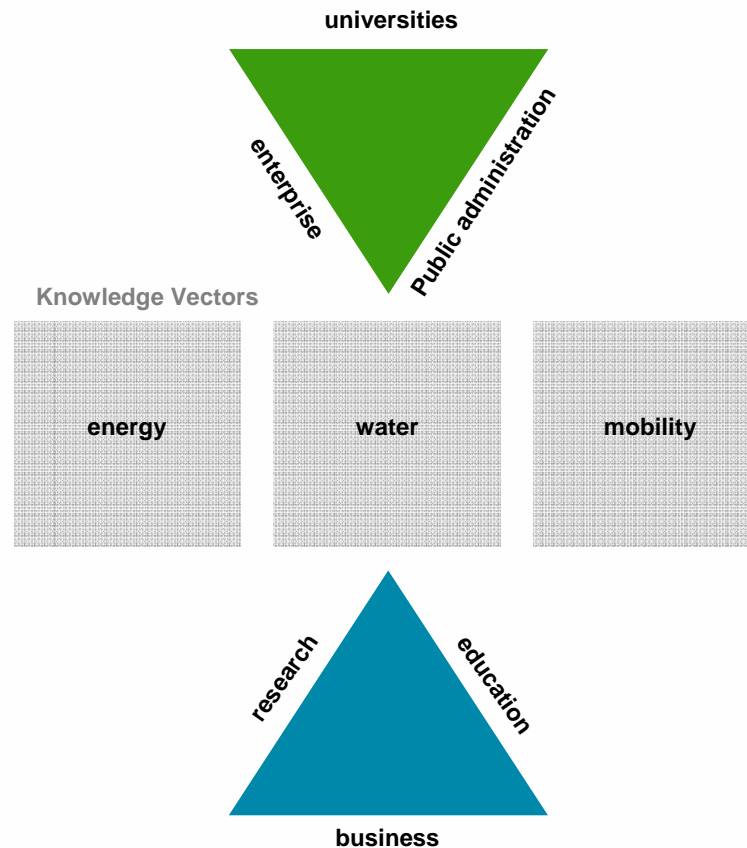




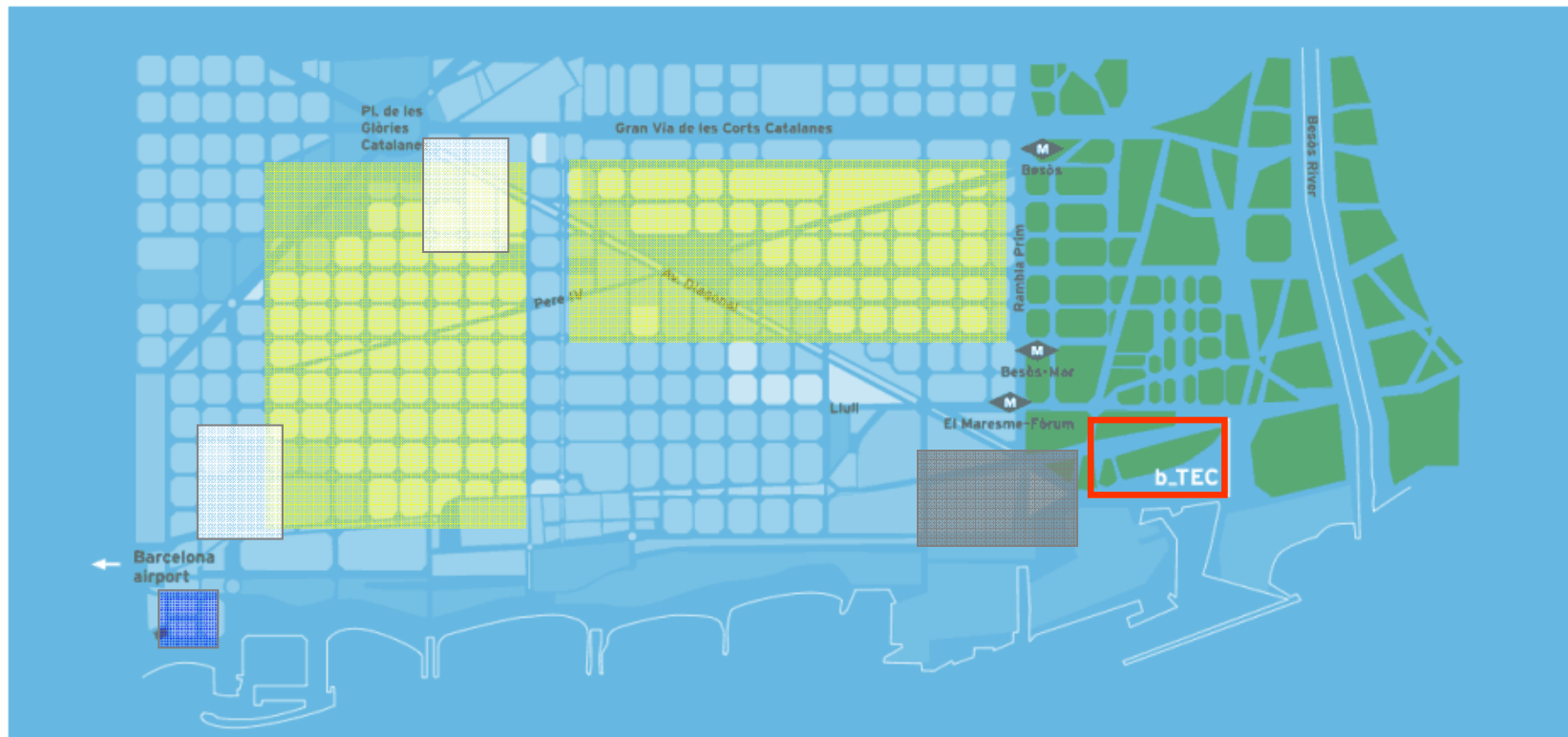
Companies	Endesa, Ecotècnia
Institutions	ITER, Cambra de Comerç
Specific spaces	Campus Offices
Universities	UB, UPC
Technological Centers	RC Energy, TC Energy
Incubators	b_TEC Incubator
Residences	b_TEC Residence
Dissemination	Campus services

General overview

A scientific and technological cluster with local and international universities and companies working together in activities focusing on the determined knowledge vectors

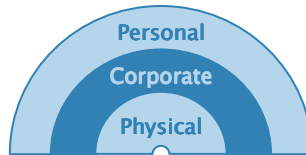


b_TEC environment the framework of 22@ district



- Urban and metropolitan centrality
- Focus on business
- Concentration of Training, R+D and Innovation Centres
- Clusters
- Advanced infrastructures
- Flexible spaces
- Quality urban environment
- Public transport networks

- 22@ district
- university campus
- congress centre
- biomedical research centre



Companies

Gaes, Matachana,
Sanofi Aventis, Semillas Fitó...

Institutions

IBEC, CIDEM, BioCat, ...

Specific spaces

BIO Enterprise Park

Universities

UB, UPF, UPC

Technological Centers

IBEC

Incubators

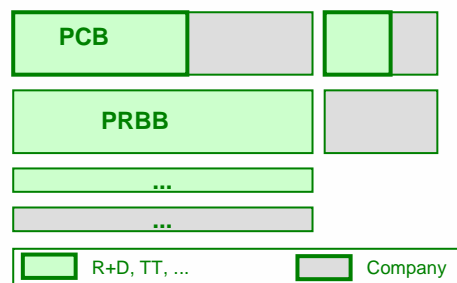
HealthBuilding

Residences

Zamora-Almogàvers

Dissemination

HealthBuilding

BIOTECH**Bio empresarial Park****22@ Barcelona:**

Spaces for biotech companies (local & internacional)

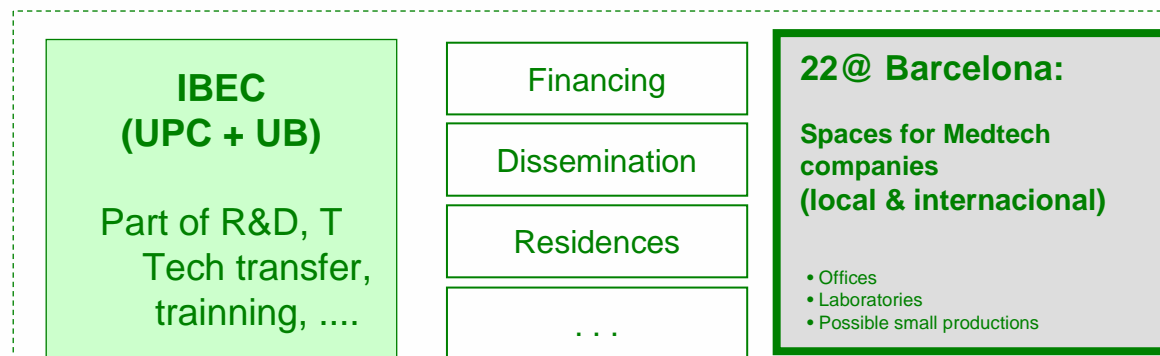
- Offices
- Laboratories
- Possible small productions

Business Atraction local & internacional

BIOTECH
+
MEDICAL
TECNOLOGIES
+
PHARMACEUTICAL
+

Some examples:

- ✓ Gaes
- ✓ Matachana
- ✓ Sanofi-aventis
- ✓ Campi i jové
- ✓ Novartis
- ✓ Semillas fitó

MEDTECH**MedTech Cluster****22@ Barcelona:**

Spaces for Medtech companies (local & internacional)

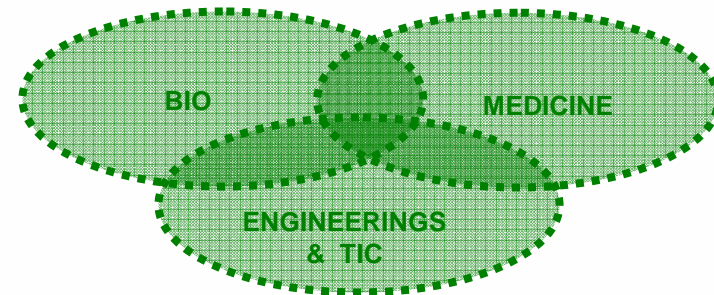
- Offices
- Laboratories
- Possible small productions

Objective:

To promote the development of clúster of activities related to the Medical Technologies of Catalan scope and to base in the district @Barcelona.

The impulse of the activities of clúster will be based on the concretion of the product, its positioning and the involution of the factors differentials:

- Investigation and Technological Transference
- Formation
- Creation and attraction of companies
- Entailment of the administrations specific
- Creation of spaces and services
- Diffusion/awareness of the sector
- Institutionalization and financing



Promoter team and support:

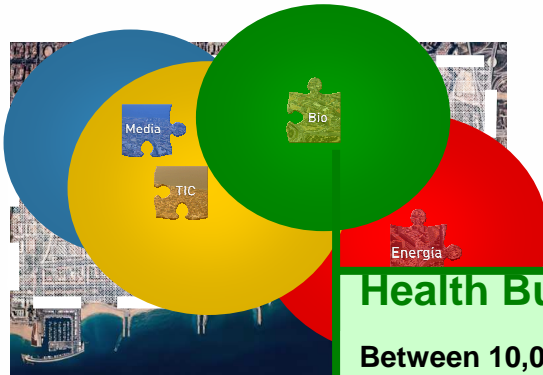
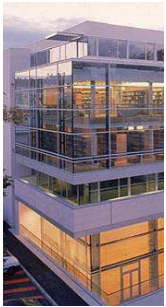
The project counts on an **promoter team formed by representatives of the public administration, research centres and of medical and enterprise sectors** and, in addition, it has **institutional and enterprise support of different administrations, business associations and concrete companies, public and privet hospitals and health organisms, international agents, etc.**

Among others:



Proposal: Creation of specialized equipment for the sector

HEALTH BUILDING



- **Representative building:** ideal for the companies of the sector of Lifescience
- **Unique and urban location:** Concentration of companies and innovating institutions of the sector, in the centre of Barcelona
- **Adapted to the companies' needs, with concentration of uses and economies of scale:** fixing the bases of the Bio offices of the future, it will have shared infrastructures, spaces of incubation, formation, and research centres.
- **Exclusive for the sector:** it will be the emblematic building for the Lifescience companies in Barcelona
- **Supported by key local and regional agents**

Health Building:

Between 10,000 and 20,000 m2 destined to Health related activities

Activities:

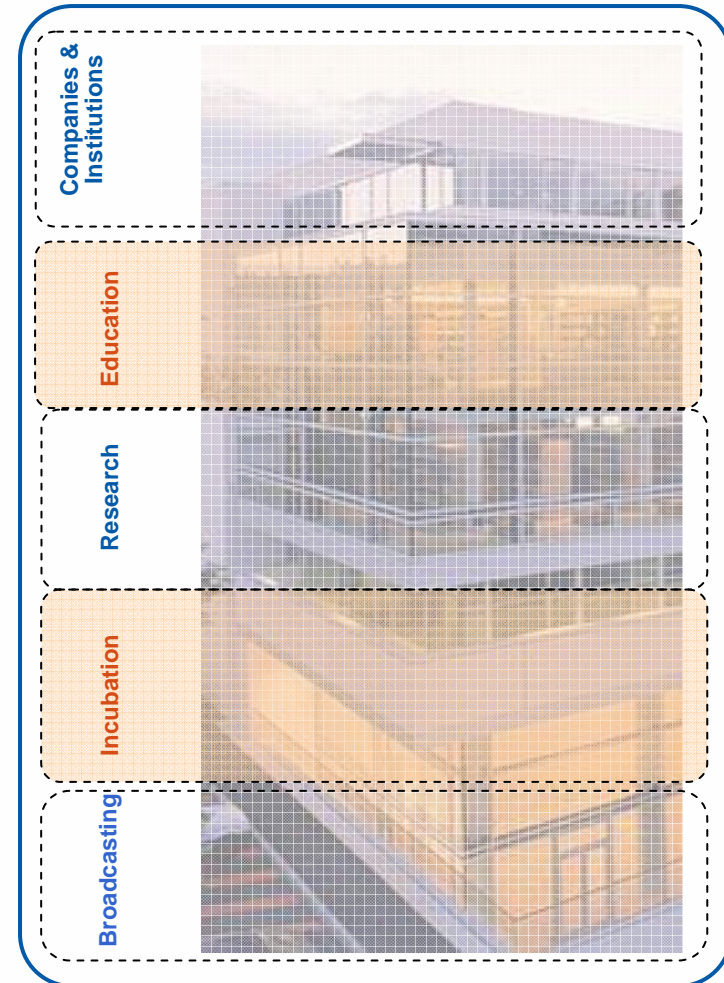
- **Technological transference and research** centers (Ibec-UPC-UB, entrepreneurship research, etc)
- **Educative center, formative activities** and seminars (Masters university and entrepreneurship education)
- **Broadcasting** spaces for the medical technologies
- **Health Incubator** with new companies and and university or hospitable spin-offs (strong relationship with existing programs of entrepreneurship : XTT, Medical doctors Association, Clinical Hospital, etc.)
- **Institutions** related to the sector
- **Companies** linked with the rest of activities of the equipment
- **Ideally, possible "medical activities"**.
- **Common services**



An emblematic building and a meeting point of the Health cluster, and, specifically, of the Medical Technologies at 22@Barcelona. It will contain spaces for companies and institutions and spaces for broadcasting, formation, and incubation reserved for entrepreneurship activities:

- Sectorial Incubators: Medical Technologies
- Barcelona Health Venture Lab

Inauguration in the 2010







22@Barcelona district: an international reference point for the creation and development of new businesses

- Barcelona Activa
- Specialized Incubators
 - Media
 - ICT
 - Energy
 - Medical Technologies
- International Incubators
 - Landing Program
- Access to financing
- Residential Centres



Technological Centres network:

- Alstom Centre for Technology Research, Development and Innovation in Urban, Interurban and Rail Transport.
- Barcelona Media Innovation Centre
- ICT Technology Centre
- Innovation Centre for Energy Technologies
- Innovation Centre for Graphic Art Technologies



Developing a financial and physical platform including mentoring and coaching services, to facilitate the establishment of global companies who want to be connected to the markets and innovation systems in southern Europe.

$$\text{LANDING} = \Sigma \text{ HARD (incubator) } \times \text{ SOFT (coaching) } \times \text{ (human capital) }$$



**Generalitat
de Catalunya**



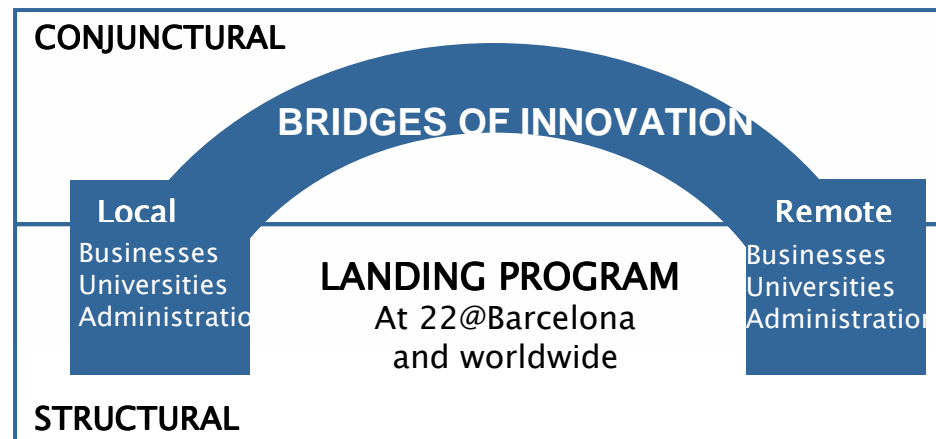
Programa Innova
UPC
UNIVERSITAT POLITÈCNICA DE CATALUNYA



FUNDACIÓ PARC
D'INNOVACIÓ LA SALLE



BARCELONA, a Reference Point for Global Innovation



International Business Incubator

France	China	Korea
Mexico	BARCELONA <i>Zero Distance</i>	Escandinavian countries
Brasil	Chile	USA

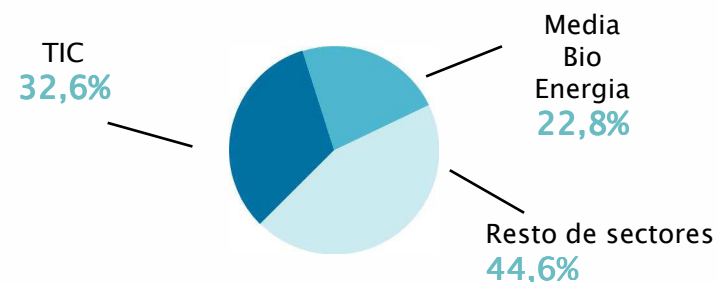


New companies located in 22@Barcelona
(Accumulated data at 12.31.2006 in number of companies)

(31st december of 2006)

Companies already located	258
Companies in process to be installed	36
Total	294

Comparing sectors of the **new companies** located in 22@Barcelona (Accumulated data at 12.31.2006, in %)

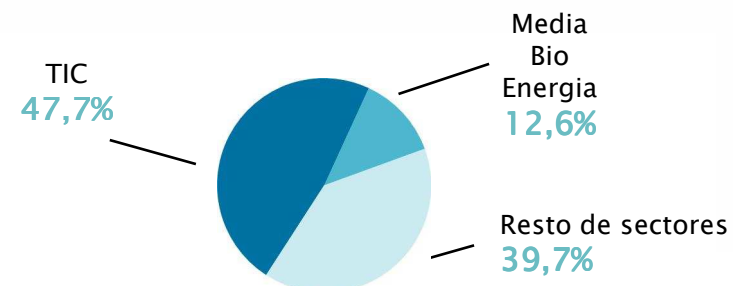


New jobs found in 22@Barcelona
(Accumulated data at 12.31.2006 in number of employers)

(31st december of 2006) 22@ environment Rest environment

Companies already located	10.724	7.100	17.824
Companies in process to be installed	6.870	3.269	10.139
Total	17.597	10.369	27.963

Comparing sectors of the **new jobs** generated in 22@Barcelona (Accumulated data at 12.31.2006, in %)





For the professionals

- Àgora Program
- Networking
- Relationship spaces
- 22@Network



For the neighbours

- Digital District Program
- Actions of direct communication
- Support to initiatives of the district
- Educative Project



Space of
Personal Relation
22@

Increase of the belonging feeling
Creation of the community 22@
Pride to work/live in 22@

- English is the *lingua franca* of global business and knowledge exchange
- Growing, energising and connecting the international english speaking community in Barcelona can:
 - increase overall social and economic vitality
 - accelerate the transformation to a knowledge city
 - help Barcelona compete as a global city
- The 22@ District can be both a living lab as well as a new pole for the international community, and the new knowledge based industries in Barcelona

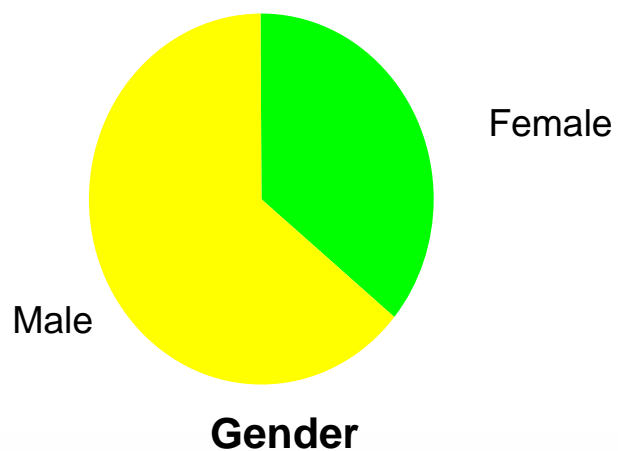
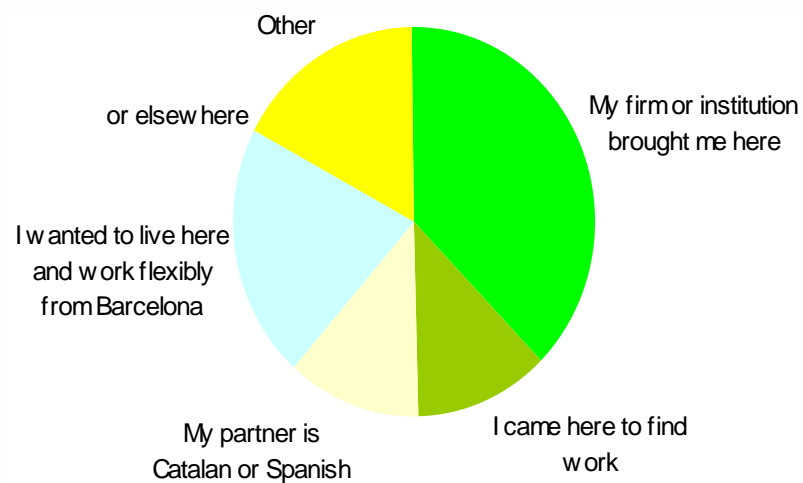
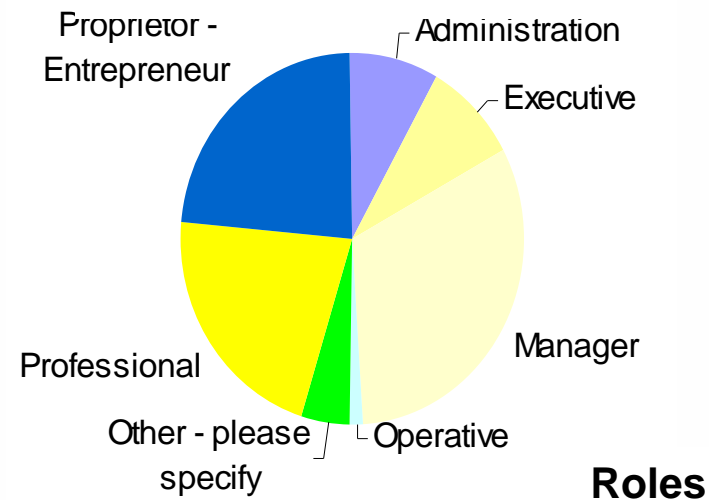
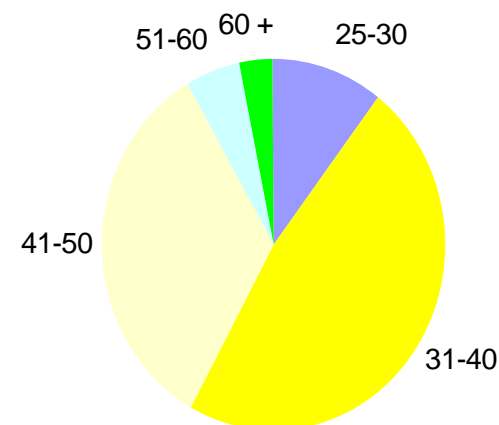
Objectives: Enhance the engagement of the English speaking international community already present in Barcelona, with the 22@ district, its firms, institutions and community so this district can lead the transformation to a knowledge city, and a global hub of innovation

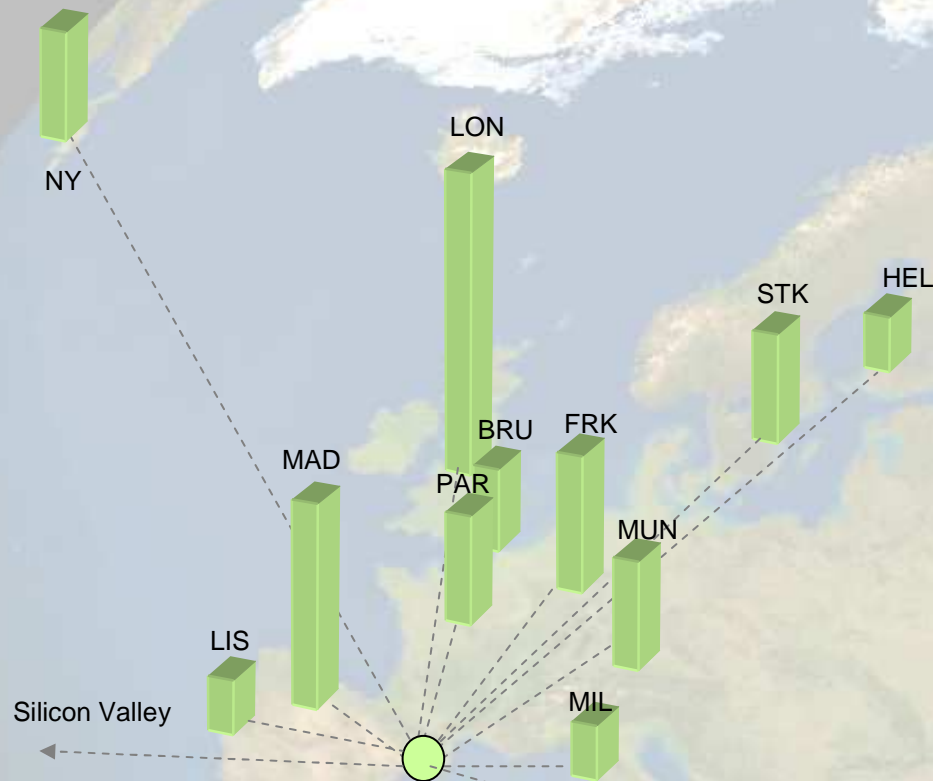


- Main reasons for coming were because company brought them here (36%) or decided they wanted Barcelona lifestyle and came seeking work or just to live (32%)
- They seek far greater engagement both socially as well as with local firms and institutions
- What contact they have is through social or professional networks and the internet, and then through schools
- Engagement with local community is low at a social level (32%), a little higher in terms of business (49%)
- Key Barriers are Language, Workplace Culture, Openness to new ideas
- Lingua Franca within the international community is 90% English and communication with local community is 80% in Spanish, very little Catalan



- Landings
 - At a personal level, need help finding and setting up home and schools
 - At a business level, they want to understand what programmes/incentives are available, and help in finding clients, and partners rather than offices
- Awareness of 22@ brand but not what it means and some feel it's just a real estate programme
 - However around half of respondents say they would be interested in working or living there
 - Awareness of other institutions and programmes is low
 - Concerned about lack of centrality, amenities, transportation
- Many comments on the need for the Ajuntament and associations to make city more cosmopolitan
- Their international network is extensive with 59 different cities with strong or very strong professional contacts

**Reason for Being Here****Age Range**



- **59 Different Cities listed in 32 different countries**
- **The 13 Cities with more than 5 mentions are shown in the table**

Top Cities and Number of Mentions

London	41
Madrid	27
Paris	21
New York	14
Frankfurt	13
Stockholm	12
Amsterdam	9
Brussels	9
Munich	8
Silicon Valley (various)	8
Milan	6
Helsinki	5
Lisbon	5

- International community not only seek greater engagement but ready to be partners
- Modest awareness and low knowledge of 22@ in both private and business community
- Don't see city or 22@ as proactively engaging with them
- And find challenges in engaging – language, work culture, openness
- English Language is the overwhelming language within this community at work and socially - Catalan is very low
- Concerns are on centrality, amenities, transport environment, housing
- Key issues around schools and education at a personal level
- At a business level:
 - Linkages and contacts in local firms – as potential clients and partners
 - Overlap, quality and responsiveness of local agencies
 - Finance and access to venture capital
 - Demand side incentives – Linking Public Sector procurement to local investment

- Enhance both business and personal landing programmes
- Step up awareness and education programmes, and do so in English
- Strengthen and extend English Language training in schools and colleges, and through associations
- Address International Schooling as urgent priority
- Build more effective networking programmes and infrastructure
- Mediate between local agencies and international companies
- Increase focus on enabling others to execute 22@ sponsored programmes, in addition to 22@ execution
- Translate 22@ District initiatives and Infrastructure into business value for each of the different stakeholder categories
- Balance “supply side” initiatives with more on the “demand side”
- Differentiate Industry Clusters through cross sector innovation not just within each pillar
- Identify key performance indicators / balanced scorecard for 22@ and then assess/priorities each initiative:
 - How do their objectives impact the overall scorecard and how are they performing in practice
- Rationalise and consolidate down the overall number of programmes/initiatives

Transforming Physical/Logical Networks

- Schools Programme
- Mobility / Transportation
- Housing
- Pervasive ICT networks
- Community Portal and related services

WiFi Pilot
Community and
Professional
Portals

Enhancing Social Networks

- Enhanced Landing for individuals and employees – the Connect Club
- Multi-Lingual District
- Ambassadors

Workshops
Virtual Memoria
Families en Xarxa
Reciclatge de PCs
Discover Sant Marti
Clicportal etc

Building Business Networks

- Big Game Hunting and a total value proposition
- Entrepreneurs Connection
- Enhanced Biz Landing
- University Challenge
- Innovation Exchange
- Demand-side Stimulus

Agora,
Investors Forum
Business Breakfasts
Channel 22@IP
Newsletter/Bulletin
Business Bridges
22@Capital
MediaTic

Appoint well connected members of international community as ambassadors to key local and international resources on behalf of 22@

- There is a significant number of individuals within the international community seeking to make a contribution to their city
- 22@ can reach out, nurture them and invite them to be ambassadors for their barrio
- And assign them responsibilities, particularly in articulating the 22@ social, cultural and commercial transformation to other networks
 - International Clubs and Associations
 - Schools
 - International Finance
 - Business Community Groups e.g. BNI, MobileMonday, Alumni ESADE, IESE etc

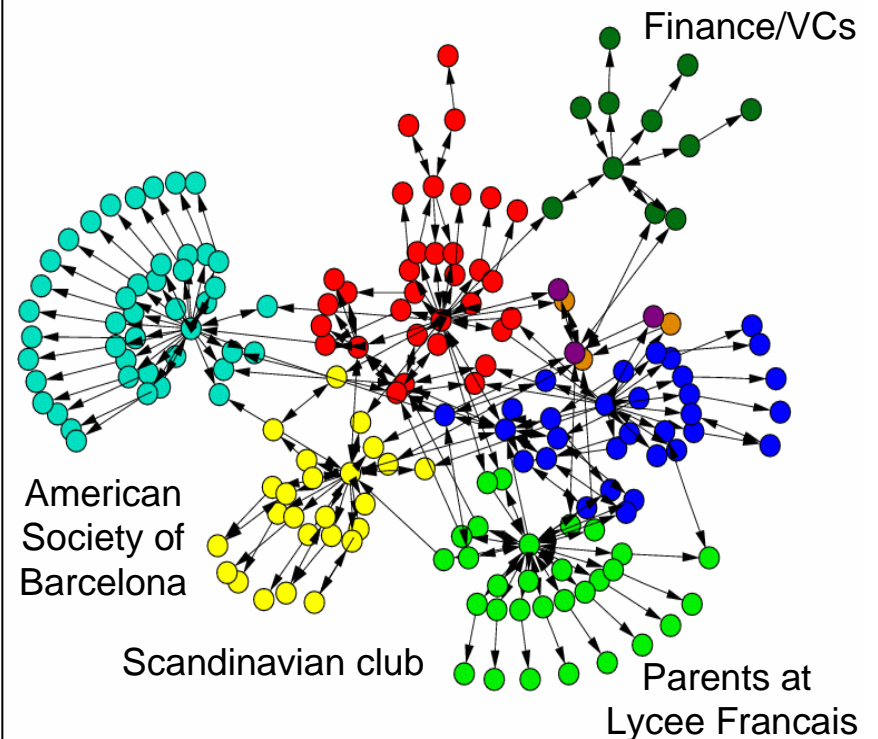
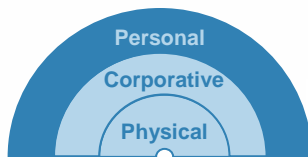


Illustration of Social Network Model



AGORA
PROGRAM

SYMPOSIUM
ON "URBAN CLUSTERS"

INTERNATIONAL
PROJECTION



22@UPDATE
BREAKFAST

22@NETWORK

PROFESSIONAL
PLATFORM

QUALITY
OF LIFE

BARCELONA WI-FI

22@ CHANNEL



@ Districte Digital



- Virtual Memory of the Sant Martí District's elders
- New multimedia classrooms
- Computer recycling network
- Families on line
- Teleworking
- Discovering Sant Martí

@ Projecte Educatiu



- In-22@companies practice program
- Professional Education Center focused on Media and ICT areas

Sponsorship and participation in the neighbourhood activities
Direct communication actions
Neighbour needs analysis

Vielen Dank!



