



indra

ENERGY, TELECOMMUNICATIONS AND MEDIA

“Energy Efficient e- Houses, 3e-HOUSES”

Technology Transfer Event, UC3M

November 10th, 2010



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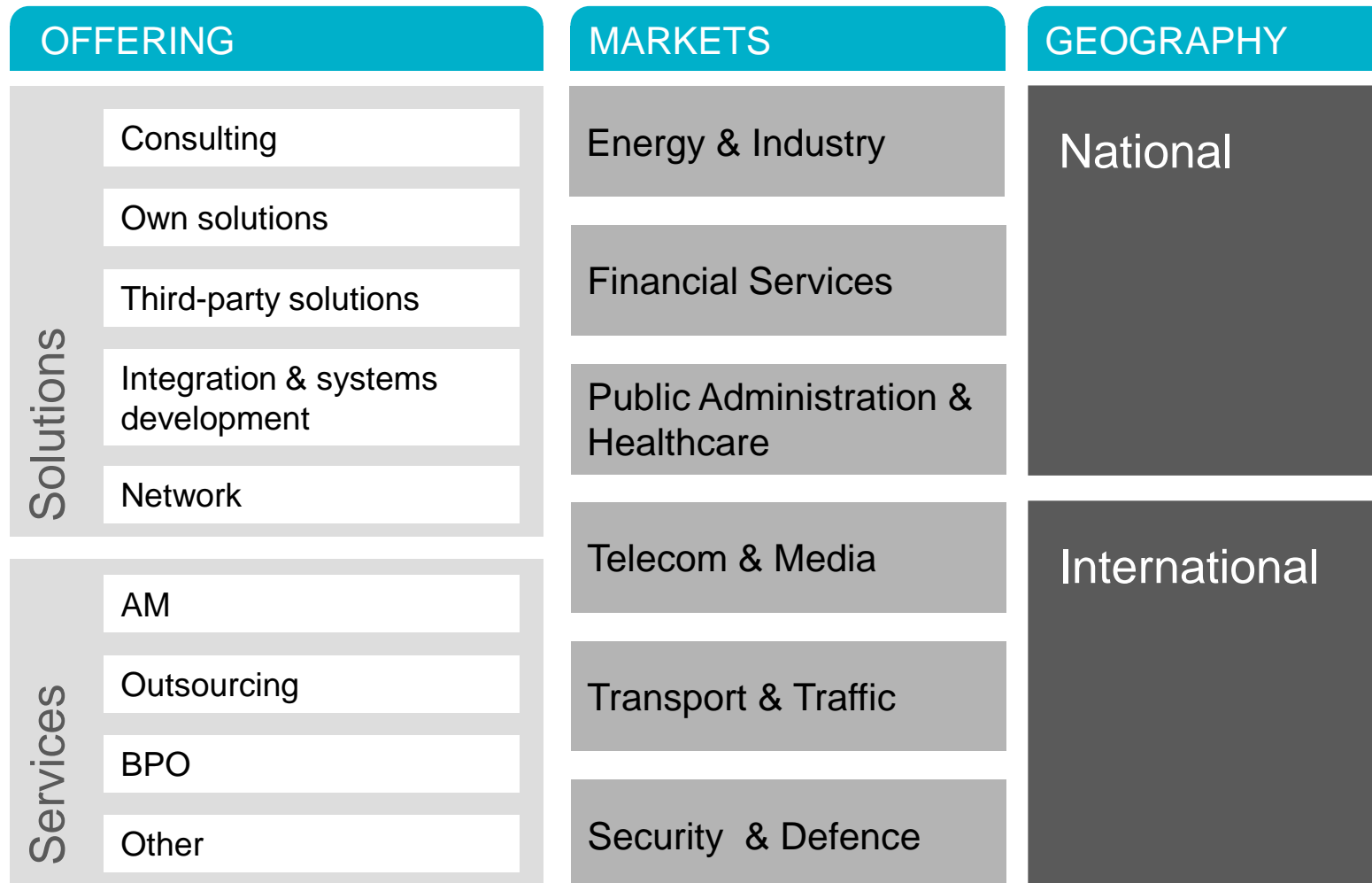
WHO WE ARE



- The premier IT company in Spain and a leading IT multinational in Europe
- 2^a European company of its sector based on its stock market capitalisation
- 2.500 M€ revenues
- 30.000 professionals
- 100 countries
- R&D 7% - 8% sales



GENERAL PRESENTATION OF INDRA
BUSINESS MODEL



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INNOVATION AND TECHNOLOGY AT INDRA
INNOVATION + TALENT

R&D

500M€ in 3 years

7%-8% sales

Collaboration with more than 120 Universities
and Research Centres

30.000 professionals

78% highly skilled degree holders

More than 40 nationalities

38 Technology Excellence Centres in
14 countries from 4 continents s

20 Software labs in 11 countries from 3
continents



INDRA: 1st RANKED IN EUROPEAN INNOVATION INVESTMENT (2008, SECTOR TI)

+ 200 Innovation Projects per year



SPAIN			R&D Investment
No	Company	ICB Sector	2007 €m
1	Telefonica	Fixed line telecommunications (653)	594,00
2	Indra Sistemas	Computer services (9533)	141,05
3	Almirall	Pharmaceuticals (4577)	101,40
4	Repsol YPF	Oil & gas producers (53)	77,00
5	Industria de Turbo Propulsores	Aerospace & defence (271)	72,47
6	Iberdrola	Electricity (753)	65,00
7	Abengoa	General industrials (272)	54,59
8	Zeltia	Pharmaceuticals (4577)	51,69
9	Acciona	Construction & materials (235)	39,02
10	Grupo Ferrovial	Construction & materials (235)	38,50
11	Gamesa	Industrial machinery (2757)	30,91
12	Grupo Empresarial ENCE	Forestry & paper (173)	13,38
13	FAES Farma	Biotechnology (4573)	11,05
14	ACS	Construction & materials (235)	8,20
15	Amper	Telecommunications equipment (9578)	7,81
16	Ebro Puleva	Food producers (357)	7,52
17	Ercros	Chemicals (135)	5,70
18	Grifols	Pharmaceuticals (4577)	5,53
19	Fagor Electrodomesticos	Household goods (372)	5,38
20	Cie Automotive	Automobiles & parts (335)	5,34
21	Pescanova	Food producers (357)	4,70



“ *Top innovative corporations build upon
all available talent* ”

- Employees
- Universities
- Research Centres
- Partners & Suppliers
- Public Administrations
- Another ecosystem: competitors, ...



Madrid Network

Instituto
Madrileño
de Desarrollo



UNIVERSIDAD
POLITECNICA
DE VALENCIA



TOYOTA

SILICONVALLEY



INNOCENTIVE
WHERE THE WORLD INNOVATES



UIMP
Universidad Internacional
Menéndez Pelayo

PLEDGE TO INNOVATION

- Indra has 38 Excellence Centres and 20 software labs, which hold tight relations with Universities.
- 147 relations with Innovation and Knowledge Centres
- 71 agreements with Universities (48 with Spanish ones and 23 with foreign ones).
- 9 corporate chairs at Universities.
- More than 90 (out of the 200) R&D projects with collaboration between Universities and Indra.
- Indra's contributions to Knowledge Institutions around 11M€ annually.



INSTITUCIONES DEL CONOCIMIENTO ↔ EMPRESA

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INTRODUCTION



- Technology Innovation Project
- 3 years duration: Feb2010 – Jan2013.
- European scope : 8 partners, diverse agents : PPAA; private corporations (SME incl.): ESCOs, ICTs; non-for-profit organizations, etc.
- Budget 4 MM EUROS.
- 50% financed by the Information and Communication Technologies Policy Support Programme, (which belongs to the EU Competitive and Innovation Framework Programme).
- ICT-based sustainable development promotion



CONSORTIUM: 8 EUROPEAN PARTNERS

1 

2 

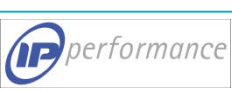
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4 

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7 

8 

■ Gas Natural Fenosa. Multiutility. Spain.

■ Indra. ICT company. Spain.

■ PROMUSA, Promotions Municipals San Cugat, S.A. (Municipality Sales and Rental Agent). Spain

■ ENNOVATIS, ICT company. Spin-Off of **Stuttgart University**. Germany.

■ BHA. Bulgarian Housing Association. Non profit organization. Bulgaria.

■ BCC. Bristol City Council. United Kingdom

■ KWMC, Non-profit, general public campaigns. United Kingdom.

■ IP-P. Network infrastructure solutions. United Kingdom.



GENERAL OBJECTIVES

The two general objectives of the project are: Saving Energy and Technology Transfer.



On-Line Provision of consumption information to consumers

- *Consumption reduction*
- *Peak Shaving*

Energy Management by ICTs-Based energy services.

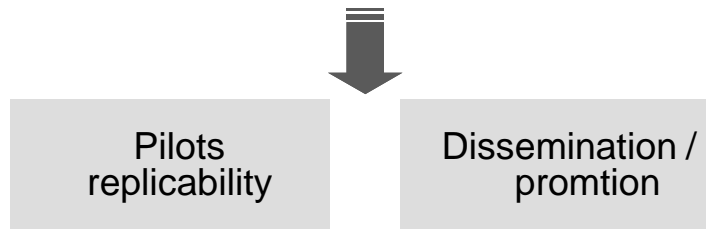
Actuation: regulation and control.

“Technology Transfer through Replicability and Dissemination and Promotion of Results”

SPECIFIC OBJECTIVES

To improve **sustainability** in **social housing** at European level, by means of ICTs-Based on-line **monitoring and management** of Energy Consumption. To achieve that goal:

- Specific Objectives:
 - Definition of methodologies;
 - Design, implementation, monitoring and validation of pilots (Spain and Germany);
 - Replication in United Kingdom and Bulgaria;
 - Results and impacts analysis;
 - **TECHNOLOGY TRANSFER**



METODOLOGIES AND IMPACT ANALYSIS

Definition

- **Methodology for Energy Efficiency Measurement:** How to calculate energy savings, measuring before and after the implementation of the ICT solutions
- **Methodology for Impact Assessment:** designed only to evaluate social and behavioural changes resulting directly from implementation of energy monitoring and energy management through ICTs.



Implementation

- **Results Analysis:** Energy savings.
- **Impact Analysis:** Impact in the social behaviour.

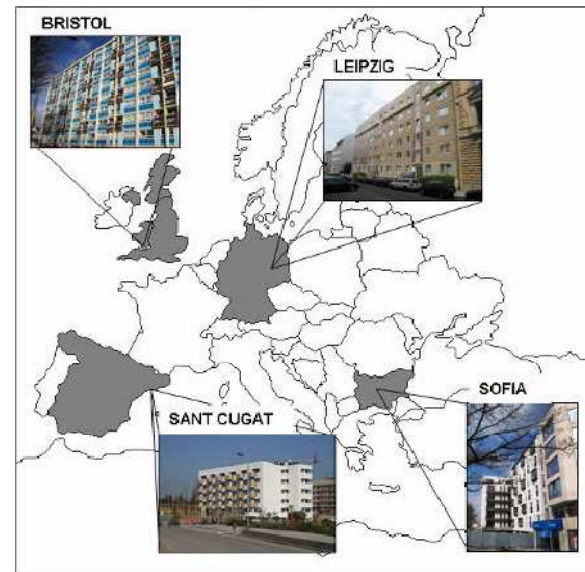


The methodology used in this project comprises all agreements reached in the workshop, as well the indicators made by the European Commission Officers who participated in that workshop”

GEOGRAPHICAL SCOPE

- Spain and Germany.. Pilots (2010-2011) :
 - Two social housing building in Sant Cugat del Vallès (Spain); 70 dwellings.
 - Social building in Leipzig (Germany); 13 apartments.

- Replicators. United Kingdom and Bulgaria (2012):
 - Social housing building blocks; Bristol, United Kingdom; 40 dwellings.
 - Social housing; Bulgarian Housing Association (BHA), Sophia, (Bulgaria); 44 apartments.



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DISSEMINATION

- **Technology Transfer: Project specific objective**
 - **Of results:** energy saving => CO₂ saving
 - Project **Replicability:** at European level, or even globally =>
=> Technological solution

- **Dissemination Plan**
 - Project web site: www.3ehouses.eu
 - Participation in events, conferences, *workshops*, press conferences, ...
 - Publications: press articles (digital and written), technical *papers* in specialized magazines.
 - Publication of project news in the company intranet “*Indraweb*”,





indra

Thank you
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