

# Graduates Employability Analysis at IST

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**1st International Conference on Graduate Employability**

IST - Lisbon 11-12 October 2012



**TÉCNICO LISBOA**



## LEGAL DEMAND

- RJIES
- A3ES
- GPEARI/DGES/MCTES



## SOCIAL DEMAND

- Media
- HE admission information
- Labour Market feedback

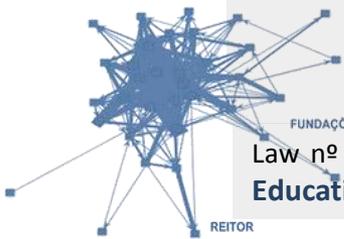


## INTERNAL DEMAND

- Strategic HEI Management
- Quality assurance internal system

# 1.1. LEGAL DEMAND

CONSELHO GERAL



*“it should be made available precise e sufficient information concerning: (...) j) Academic performance and success, as well as employability of the courses (...).”*

Law nº 62/2007 – Article 162, nº2 **Legal Regime of Higher Education Institutions (RJIES)**

## A3ES

Agência de Avaliação e Acreditação do Ensino Superior

*“To publish on a regular basis, quantitative and qualitative up-to-date, impartial and objective information concerning the professional career of graduates for a reasonable amount of time “*

Law nº 38/2007 – Article 18, e.II) **Legal Regime of Higher Education Institutions Evaluation**

## GPEARI

Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais  
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR



GPEARI  
Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais  
Ministério da Ciência, Tecnologia e Ensino Superior

A PROCURA DE EMPREGO DOS DIPLOMADOS  
COM HABILITAÇÃO SUPERIOR

RELATÓRIO VII | JUNHO 2010

OUTUBRO 2010

## 1.2. INTERNAL DEMAND



### HEIs Strategic Management

- Appeal/approach to HE Candidates
- Evaluation of the HEI performance and efficiency of its courses (Employability)
- Marketing the HEI within the Labor Market/Employers

IST must assure “... permanent evaluation of its activities by means of internal institutional resources.”

### IST Statutes

#### Factos & Números

Fundação	1911
Presidente	António Cruz Serra

#### Ensino

Estudantes	10576
1º Ciclo	6260
Mestrado	3179

#### Empregabilidade

61%	de alunos empregados antes de concluir o curso
92%	de alunos empregados até 6 meses após a conclusão do curso



### Quality Assurance Internal System

- Develop corrective actions (ex.: curricular adequation)
- Develop improving actions (ex.: create a portfolio curricular unit; create an entrepreneurship curricular unit; IST Career Workshops)

IST CareerWorkshops

# 1.3. SOCIAL DEMAND

## Media Relevance (rankings, statistics, etc.)

Quadro II.8 – Cursos com maior número de desempregados, Junho de 2010 (Continente) e diplomados 1999-2000 a 2008-2009

Subsistema de ensino	Cód. Estab.	Estabelecimento de ensino	Cód. Curso	Curso	Habilitação	N.º Registos
Ensino superior público - universitário	1104	Universidade do Porto - Faculdade de Economia	0156	Economia	Licenciatura	231
Ensino superior privado - politécnico	4069	Escola Superior de Artes e Design	1152	Design	Licenciatura	228
Ensino superior público - universitário	0702	Universidade de Lisboa - Faculdade de Direito	0153	Direito	Licenciatura	222
Ensino superior privado - universitário	4500	Instituto Superior Miguel Torga	0755	Serviço Social	Licenciatura	212
Ensino superior privado - universitário	4150	Instituto Superior de Novas Profissões	0736	Relações Públicas e Publicidade	Licenciatura	198
Ensino superior público - universitário	0502	Universidade de Coimbra - Faculdade de Direito	0153	Direito	Licenciatura	186
Ensino superior privado - universitário	4450	Instituto Superior de Psicologia Aplicada	0698	Psicologia Aplicada	Licenciatura	185
Ensino superior privado - universitário	2800	Universidade Lusófona de Humanidades e Tecnologias	0695	Psicologia	Licenciatura	171
Ensino superior privado - universitário	2100	Universidade de Lisboa	0000	Arquitetura	Licenciatura	170

MEDIA

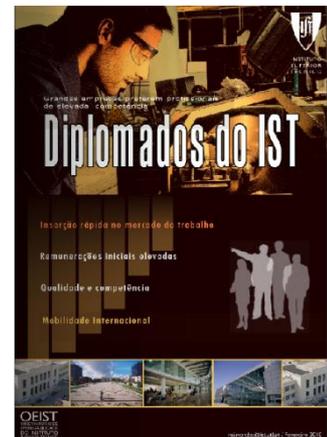
Provide information for HE candidates and their families (ex: Awareness in secondary schools)

Provide information about labor market for HE Graduates (Reports, Brochures, OEIST)



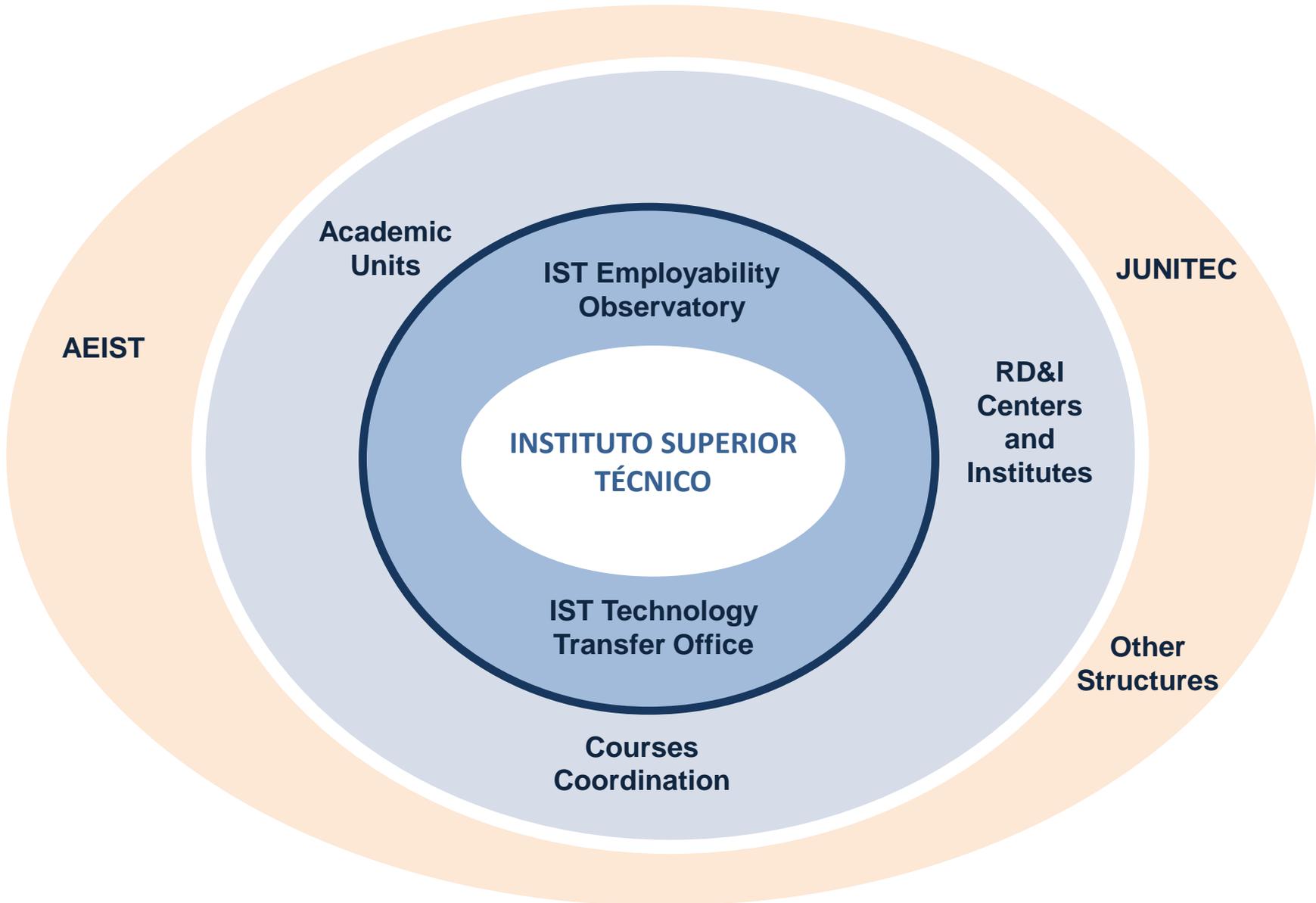
HIGHER EDUCATION ADMISSION

LABOR MARKET ACCESS



# 2. EMPLOYABILITY STRUCTURES at IST

- Formal Institutional Structures
- Non-Formal Institutional Structures
- Associative and Other Structures

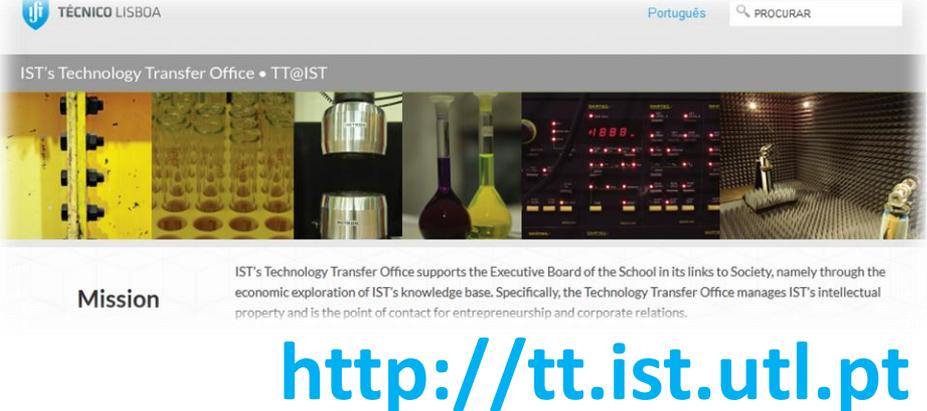


# TT@IST

The Technology Transfer Area at IST (TT@IST) aims **to SUPPORT THE MANAGEMENT BOARD IN BRINGING IST CLOSER TO SOCIETY, NAMELY THROUGH THE ECONOMIC VALORIZATION OF KNOWLEDGE AND INTELLECTUAL PROPERTY**. It is also the focal point for the establishment of more **DYNAMIC RELATIONS WITH COMPANIES** and for the **SUPPORT OF ENTREPRENEURSHIP**.

The TT@IST has 4 areas of intervention:

- **Corporate Partnerships**
- **Entrepreneurship and Innovation**
- **Intellectual Property**
- **Career Development**



The screenshot shows the website for TT@IST. At the top, there is a header with the IST logo and 'TÉCNICO LISBOA' on the left, and 'Português' and a search bar labeled 'PROCURAR' on the right. Below the header, the text 'IST's Technology Transfer Office • TT@IST' is displayed. A banner image shows various laboratory equipment including a rack of test tubes, a coffee machine, and a control panel with red digital displays. Below the banner, the 'Mission' section is visible, containing the text: 'IST's Technology Transfer Office supports the Executive Board of the School in its links to Society, namely through the economic exploration of IST's knowledge base. Specifically, the Technology Transfer Office manages IST's intellectual property and is the point of contact for entrepreneurship and corporate relations.' At the bottom right of the screenshot, the URL <http://tt.ist.utl.pt> is displayed in large blue text.

## 2.1. FORMAL INSTITUTIONAL STRUCTURES



**OEIST**  
OBSERVATÓRIO  
DE EMPREGABILIDADE DO IST  
TÉCNICO LISBOA

OEIST is a structure focused on **DEVELOPING AND IMPLEMENTING MECHANISMS OF REGULAR MONITORING OF THE PROFESSIONAL SITUATION OF IST GRADUATES** and to promote their employability through the analysis and dissemination of information directly and indirectly related to their path as graduated professionals. The statistics and results made available by the OEIST are also used to respond to the legal requirements which demand HEI to have information about their graduates professional path



<http://oe.ist.utl.pt>

## 2.2 Non-formal institutional structures / Associative Structures

### Non-Formal Institutional Structures

Aside from the formal structures who perform periodic and established activities in terms on employability, there are **SOME ACTIONS (SPONTANEOUS OR RECURRING) CARRIED OUT BY OTHER STRUCTURES.**

These actions can range from A **JOB OFFER PORTAL ON THEIR WEBSITE** to organizing a **JOB FAIR OR ESTABLISHING PROTOCOLS WITH COMPANIES FOR INTERNSHIPS AND EXCHANGE OF KNOWLEDGE AND EXPERIENCES OR THE CREATION OF JOB FORUMS OR ALUMNI NEWSLETTERS OR COMPANIES VISITS OR DEPARTMENTS JOURNEYS,** namely on departments or course units

It is not possible to elaborate with detail on these activities due to their nature, but it is important to make notice that **EVEN STRUCTURES AND OFFICES WITH OTHER FOCUSES RATHER THAN THE EMPLOYABILITY**  
**ALSO TAKE THE INITIATIVE TO PROMOTE AND CONTRIBUTE IN THIS DOMAIN**

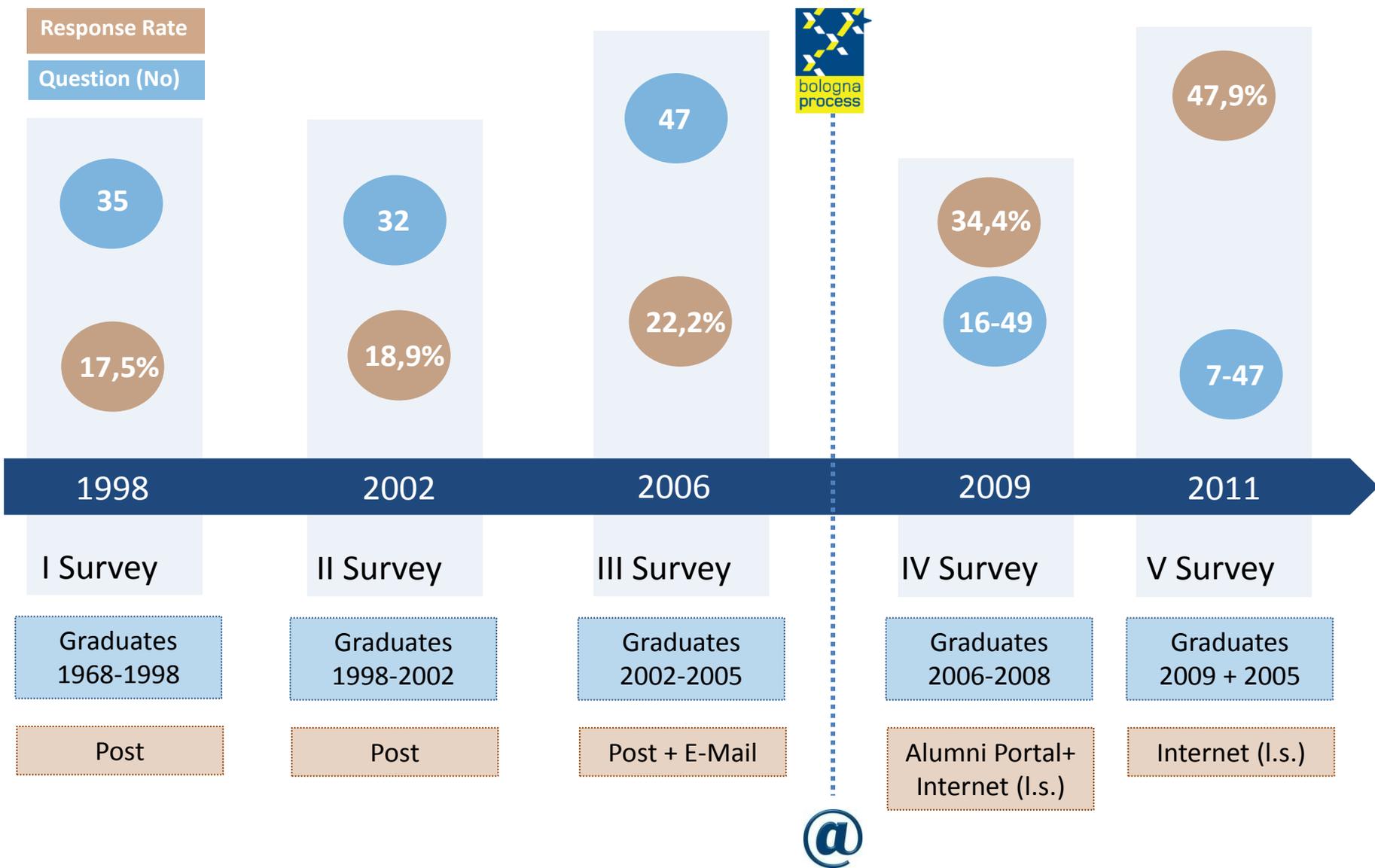
### Associative Structures



The Structures, while not institutional are somehow linked or associated with IST (mainly through their current and former students) and develop efforts in promoting employability

**EXAMPLES: JOBSHOPS, SPECIFIC UNITS TO ATTEND TO THE STUDENTS NEEDS IN TERMS OF JOB OFFERS AND EMPLOYABILITY SUPPORT, SET UP CONDITIONS TO CREATE START-UP COMPANIES, DEVELOPMENT OF NEW COMMERCIAL PARTNERSHIPS, ETC**

# 3. Evolution of the analytical perspective at IST



# 4. Main Methodological Aspects



## 1 TARGET POPULATION

- SAMPLING FRAME
- REPRESENTATIVENESS/  
SAMPLING
- RESPONSE RATE
- SUB-POPULATION  
ANALYSIS

## 2 KEY INDICATORS

- WAITING TIME (1<sup>st</sup> job)
- CONTRACT
- WAY TO GET JOB
- INCOME
- INTERNATIONALIZATION  
(Graduates working abroad)

## 3 INFORMATION COLLECTION

- PRIMARY/ SECONDARY  
DATA
- NATURE OF THE  
INFORMATION  
GATHERING

## 4.1. TARGET POPULATION (2011-2012)

		SAMPLING FRAME/ POPULATION	RESPONSE RATE	NOTES		
EMPLOYABILITY	1st CYCLE	GRADUATES (not continue to 2 <sup>nd</sup> cycle at IST)	83	37%	<ul style="list-style-type: none"> <li>• Small sampling frame</li> <li>• Course representativeness compromised</li> </ul>	
	2st CYCLE	FINAL YEAR STUDENTS		1596	49%	<ul style="list-style-type: none"> <li>• Updated sampling frame (local/current population)</li> <li>• High response rate (without additional pressing)</li> </ul>
		GRADUATES	1 YEAR PROFESSIONAL EXPERIENCE	697	48%	<ul style="list-style-type: none"> <li>• Strong institutional commitment</li> <li>• Improved response rates</li> <li>• Good course representativeness</li> </ul>
			5 YEARS PROFESSIONAL EXPERIENCE	883	34%	<ul style="list-style-type: none"> <li>• Outdated contacts (15%)</li> <li>• Less linkage to the institution</li> <li>• Hard to obtain good response rates</li> </ul>
			10 YEARS PROFESSIONAL EXPERIENCE	In development	In development	<ul style="list-style-type: none"> <li>• Incomplete sampling frame (18%)</li> </ul>
		EMPLOYERS		170	48% (13%)	<ul style="list-style-type: none"> <li>• Lack of commitment from Employers</li> <li>• Indirect access to survey (Survey filled by a 3<sup>rd</sup> person)</li> </ul>
	3st CYCLE	GRADUATES	290	48%	<ul style="list-style-type: none"> <li>• Population with different characteristics – Analytical focus on the course impact</li> </ul>	

# 4.2. KEY INDICATORS

1998

2011

I and II Report	III e IV Relatório	V Relatório
<ul style="list-style-type: none"> <li>• Waiting Time (1st job)</li> <li>• Contract</li> <li>• Way to get job</li> <li>• Position</li> </ul>	<ul style="list-style-type: none"> <li>• Waiting Time (1st job)</li> <li>• Contract</li> <li>• Way to get job</li> <li>• Position</li> </ul>	<ul style="list-style-type: none"> <li>• Waiting Time (1st job)</li> <li>• Contract</li> <li>• Way to get job</li> <li>• Position</li> </ul>
<ul style="list-style-type: none"> <li>• Income</li> </ul>	<ul style="list-style-type: none"> <li>• Income</li> </ul>	<ul style="list-style-type: none"> <li>• Non-Variable Income</li> <li>• Variable Income</li> <li>• Incentives</li> <li>• Job Offers</li> </ul>
	<ul style="list-style-type: none"> <li>• Internationalization</li> </ul>	<ul style="list-style-type: none"> <li>• Internationalization</li> </ul>

*“different types of population imply different kinds of instruments/indicators”*

		Recent	5 Years Professional Experience	5 Years Professional Experience
ANALYTICAL GOALS	3rd Cycle	Analysis of the impact of the 3 <sup>rd</sup> cycle course on the social, economical and professional life		
	2nd Cycle	<ul style="list-style-type: none"> <li>• Variables concerning professional career and first access to labor market</li> </ul>	<ul style="list-style-type: none"> <li>• Variables concerning professional career and first access to labor market</li> </ul>	<ul style="list-style-type: none"> <li>• Variables applied only to X years of professional experience (ex: Self-Employment, Post-graduate education)</li> </ul>
	1st Cycle			

## 4.2. KEY INDICATORS (Some outputs)

### Types of job incentive

#### Incentivos

dados pela entidade patronal



### Job Offers (Average)

Média de ofertas de trabalho recebidas

antes e depois de concluir o curso



Before and after graduation

### Remuneração mensal

remuneração fixa e variável

### Monthly Income (average) Non-Variable and Variable



total:  
2,552.49€

total:  
1,441.21€

■ remuneração fixa

■ remuneração variável

● 5 years of professional experience (coorte 2005)

● 1 year of professional experience (coorte 2009-recent graduates)

## 4.2. KEY INDICATORS (some outputs cont.)

### Mobility

(graduates working abroad)

### Mobilidade Internacional

taxa de internacionalização



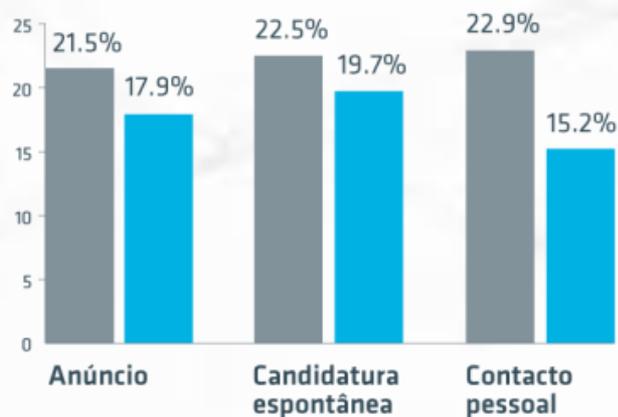
### Frequent destinations

destinos mais frequentes



### Way to get job

### Formas de colocação



● 5 years of professional experience (coorte 2005)

● 1 year of professional experience (coorte 2009-recent graduates)



# 5. IMPACT EXAMPLES

## Curricular adequation

Creation of new Curricular Units. Reorganization of Courses based on, among other indicators, employability rates (ex: Too much waiting time to access first job)

## Media Reply

To provide media with information/data and to support the IST management board media presence



## No of website visits (Google analytics)

Increase the number of visits to the OEIST website

## Secondary Schools request for IST promotional visits

Support data to specify the potential labor market for IST graduates.

## Logistics cost reduction

Online surveys are less expensive and allow a better management of resources (both human and material). Almost immediate analysis of the gathered data.



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