Dipartimento di Informatica, Sistemistica e Telematica
Department of Communication, Computer and System Science

European Commission
TEMPUS

UNAM

info@dist.unige.it

www.dist.unige.it

Genova, 15/4/2011

Organization, tasks, board and management of a scientific department

Special focus on: budget, autonomy features and self-financing tools

Summary

- What is a department?
- General organization
  - Governance
  - Tasks
  - Management
- Case study: DIST
  - Organization
  - Autonomy
  - Accounting and administration
  - Funding and budget

What is a department? – 1/4

The departments are the scientific bodies of the University.
A department is organised as follows:

- financial autonomy
- own budget and balance
- own personnel
- own spaces

The management structure is always the same:

a Director
a Deputy Director
an Administrative Head (Secretary)

What is a department? – 2/4

The **activities** of a department are principally based on:

- research and technological transfer
- teaching and support to students

Every professor has the choice to **opt for a department** and to ask for it.

The researchers (professors) have the **base** by a dep., where they find support to research and teaching.

What is a department? – 3/4

Research and technological transfer

The department is the centre of the research and research development.

Therefore the **scientific departments** have **laboratories** and **equipment** in order to carry out research projects and to perform experiments, base and advanced research.

In the scientific departments this activity is based on **funding** coming directly from business and industrial contacts such as national and international research projects.

What is a department? – 4/4

Teaching and support to the students

Our Constitution (the main law in Italy) stated that art and science are free and everyone can teach them free (art. 33).

Therefore the Universities can get an own regulation in **full autonomy**.

The Italian law fixed the **teaching effort** of each professor in order to ensure to the students an important support during their carriers and let researchers free to do **research**.

General Organization - 1/9

Governance – The Director

The **Head** of the Department is an elected **full time Professor**. His mandate is **3 years** long and can be repeated only once.
He/she can have a **Deputy** and has the direct responsibility toward the staff personnel.

The Director **represents the rector** in the contractual liabilities and can sign every research and commercial contract.

The **organization** of the personnel staff and of the activity of the whole department belongs to him/her.

General Organization - 2/9

Governance – The Adm. Secretary

The head of the administrative management is the **Administrative Secretary**.

He/she is responsible for the financial and **accounting management** of the department. The Secretary is the supervisor of the administrative and financial department activity as a whole.

The two (the Head and the Secretary) bear the **responsibility** of the financial management of the department.

General Organization - 3/9

Governance – The Dep. Board

The **department council** is a board composed by every permanent researcher within the department and by representatives of the staff personnel such as technicians and administrative staff and PhDs.

It **chooses** the Head of dep. among the professors.

As a whole it is the **programming body** of the department, it gives directions to the Dep. concerning research, management, teaching, scholarships, contractual activity, recruitment etc.

Generally it has a meeting per month.

General Organization - 4/9

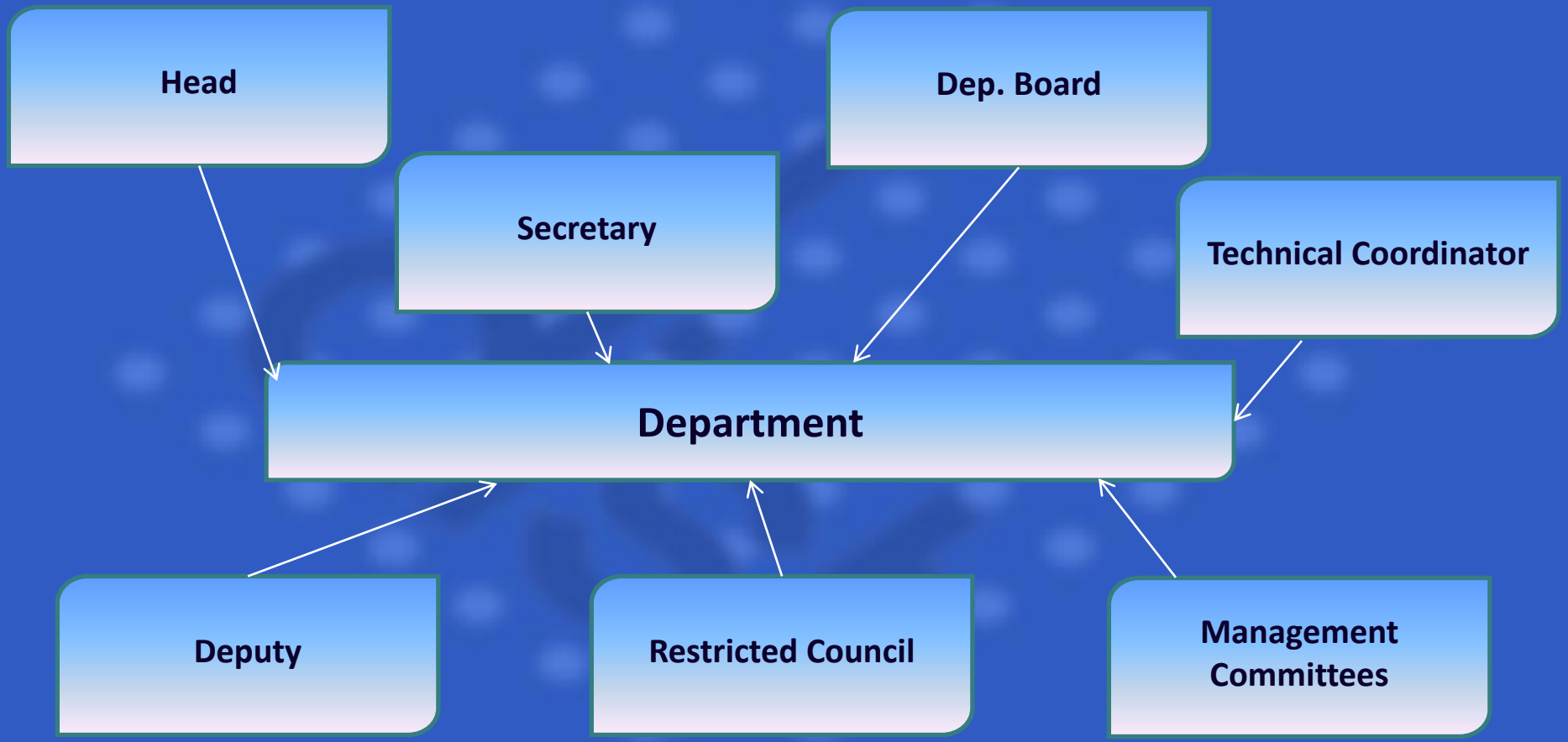
Governance

The **department** is the best expression of management decentralization. It is an independent and autonomous **branch** of the **tree** represented by the University.

The governmental structure of the department helps these independency and autonomy and let the department working well and in an **efficient** way.

General Organization - 5/9

Governance



General Organization - 6/9

Tasks

The **goals** of the department are:
- teaching and correlated activities
- research
- to promote research and network activities

The structure, the personnel and the general **organization** of the department help in carrying on these tasks.

They have to be more and more independent and autonomous even in **fund raising**.

General Organization - 7/9
Tasks

The departments are **evaluated** concerning the achievement of these goals.

Therefore they have to **demonstrate** to the Faculty, to the University and to the Education Ministry (in different **evaluation forms**):

- publications and dissemination
- technological transfer
- funding
- international projects
- project proposals
- PhD students
- research fellows
- teaching effort per courses
- students per courses
- final dissertations support
- others

General Organization - 8/9

Management

The management structure of a department is like that one of a private firm, but with some difference.

We have three **sectors of activity**:

1. Financial management
2. Research management
3. Teaching management

With three different **personnel categories** in the staff:

1. Professors and researchers
2. Technical staff
3. Administrative staff

Moreover we have **people researching and working** for us, but not permanent staff:

1. Collaborators
2. Research fellows
3. PhD students
4. Students in general

General Organization - 9/9

Management

The Department is a **complex system** resuming three different "**souls**", with **non homogeneous** activities and personnel. Therefore the general administration, the everyday life and the planning have to face **different levels** of difficulties.

The Department has always to look to the **future** and to learn from the **past** in order to work well in the **present**.

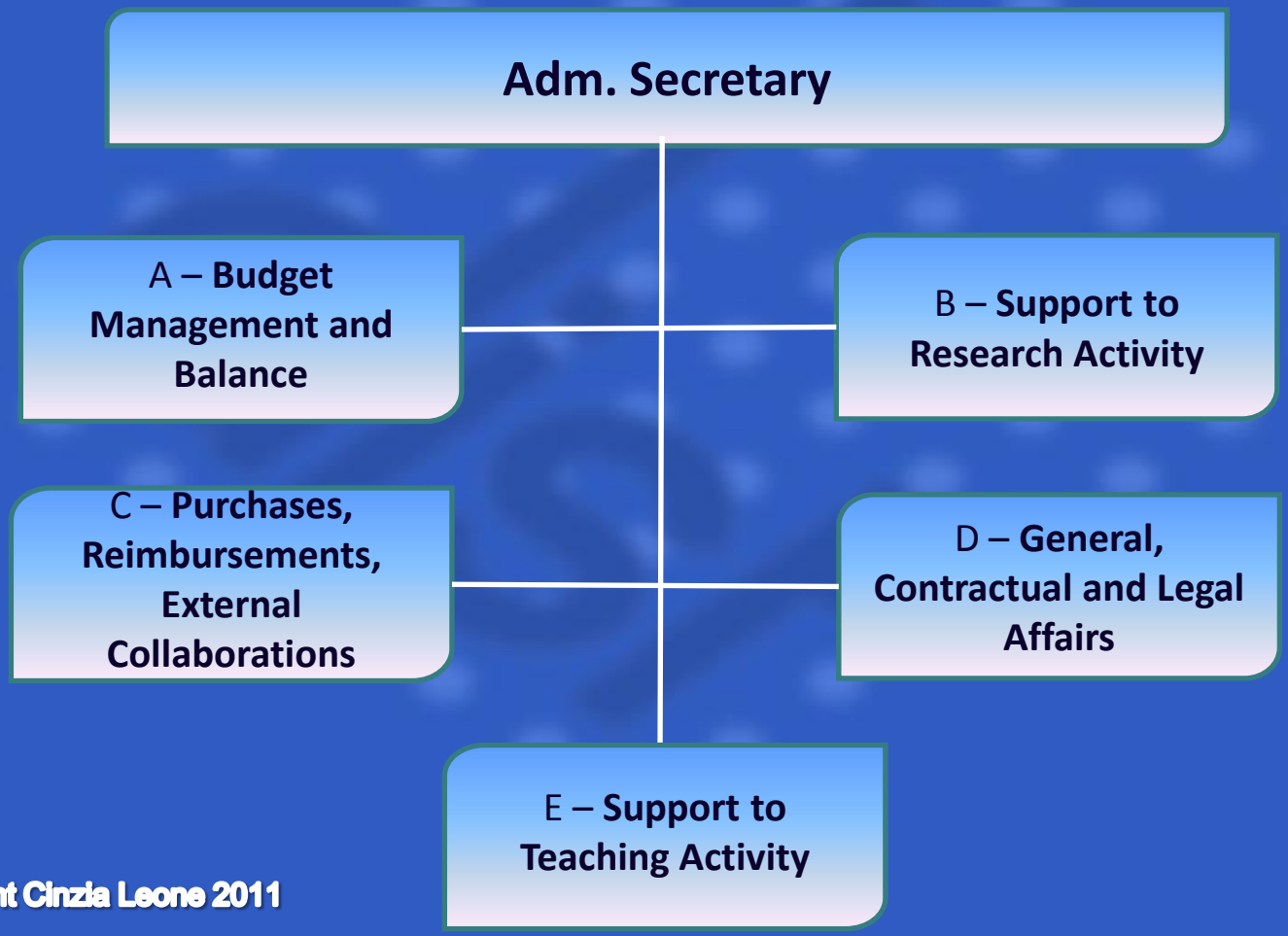
Case study: DIST – 1/19

Some numbers

- ***Established in 1984***
- ***Personnel:***
  - *Research & Teaching permanent staff:* ***51***
  - *Administrative & Technical permanent staff:* ***26***
  - *PhD Students:* ***~ 130***
  - *Research Fellows:* ***39***
  - *Scholarships:* ***6***
  - *Research Contract Temporary staff:* ***~ 35***
- ***Disciplinary Macro-Areas****:*
  - *Systems and Control*
  - *Computer Science*
  - *Communications*
  - *Operation Research*
  - *Bioengineering*
  - *Environmental Science*
  - *Industrial and Business Management*

Case study: DIST - 2/19

Adm. Services Dep. Organization



Case study: DIST – 3/19

Technical Services Dep. Organization

Technical coordinator

A – **ICT**

Committee : Network

B – **Web and Software**

Committee: Website

C – **Maintenance and Security**

Committee : Maintenance
Committee : Maintenance Branch in Savona
Committee : Security and Disposal

D – **Hardware**

Committee : Hardware

Case study: DIST – 4/19

Research structure

- ***Laboratories:***
  - *Research labs : **20***
  - *Teaching labs: **3***
  - *Joint labs: **4***
    - *One with Eni: DE – Lab for Logistics and Security*
    - *One with Siemens AD: LIDO - Software for Automation*
- *Inter-University **Centres: 2***
- **Technological Districts in Genova and La Spezia (Liguria Region):** *main participation of Dist*

Case study: DIST – 5/19

Autonomy

The Department is an **independent** and **autonomous** body within the higher educational system.

Its autonomy regards four fields:

1. Regulation autonomy
2. Teaching and educational autonomy
3. Organization autonomy (as already seen in the slide)
4. Financial autonomy

Case study: DIST – 6/19

Regulation and Teaching Autonomy

The Department has the power to write **own regulations** regarding the everyday life of the dep. within the Italian law and the University regulations. This is in order to comply with the necessity of an **efficient and effective management** of public affairs.

Every department helps the **teaching activity** of the Faculty by means of their members. It can help in managing the **study courses** or the **doctorate** funding, even searching private and public contribution for **specific teaching goals**.

Case study: DIST - 7/18

Teaching Autonomy

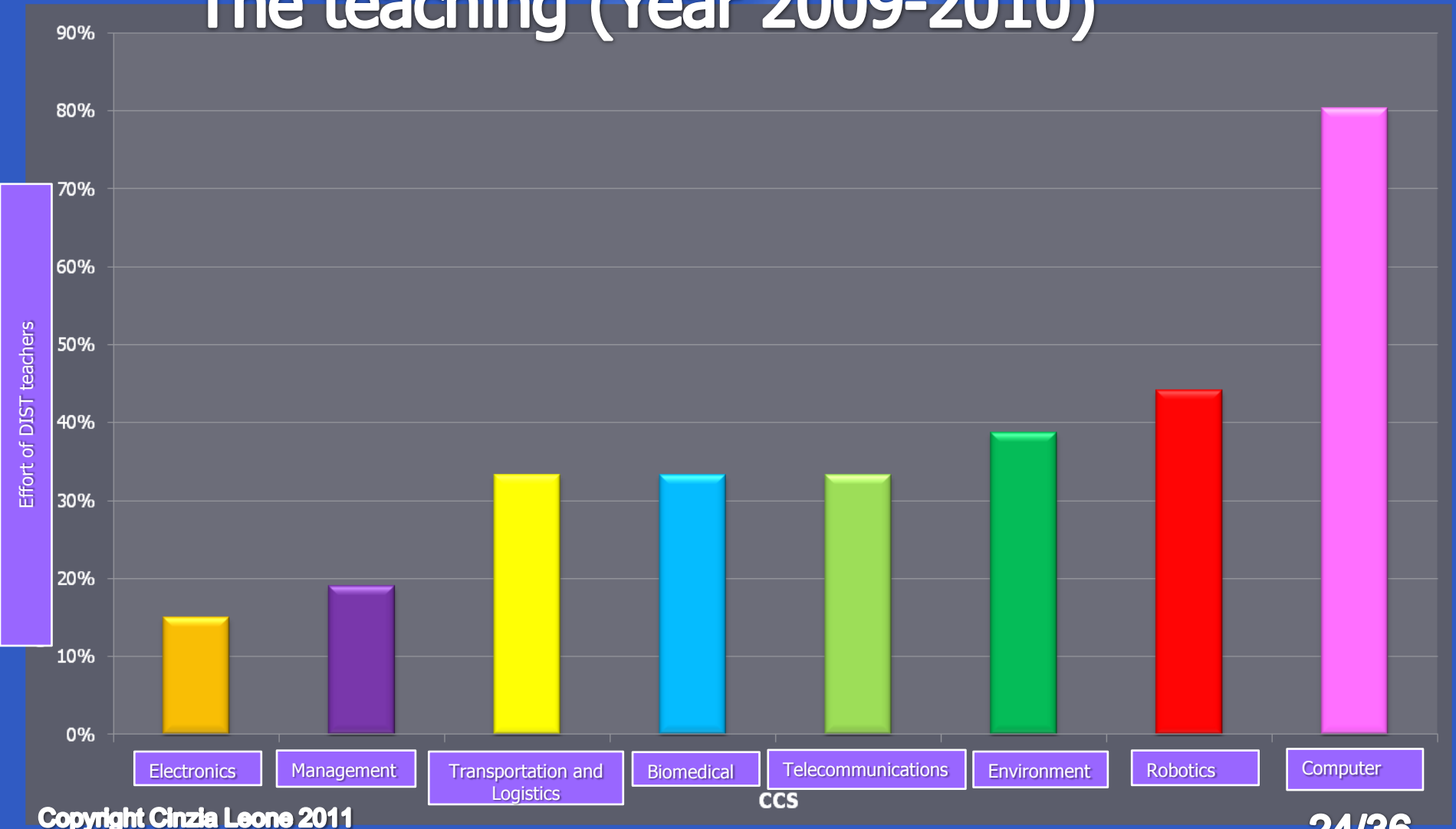
Major Engineering Degrees Involvement

- *Computer Engineering*
- *Communication Engineering*
- *Electronic Engineering*
- *Bio-Medical Engineering*
- *Environmental Engineering*
- *Management Engineering*
- *Robotics*
- *Logistics and Transport Engineering*

Case study: DIST - 8/19

Teaching Autonomy

The teaching (Year 2009-2010)



Case study: DIST – 9/19

Financial Autonomy

The Department the more is large the more represents a **complex system**. It has:

- a **balance** sheet
- a **budget** sheet
- a **consolidated** balance sheet (of the whole university) on the base of a **final** balance

*The Head of the Department accompanies all these documents with explanatory **reports**, forecasting the future annual balance and the financial dep. situation.*

Case study: DIST – 10/19

Financial Autonomy

The dep. **balance** is related to:

Cash and accruals

*Their **structure** is fixed by the law and by the regulations related to the public bodies.*

*It has to be **balanced** and not with losses, but with credits. The **planning** of the activities, the **business management** , the **budgeting** are fundamental steps of the balance process.*

Case study: DIST – 11/19

Financial Autonomy

Self financing tools - 1/3

*In order to achieve full **economic independence** the dep. has to find its own funding, selling **research** and **research products**, together with developing **technological transfer**.*

HOW?

DIST has developed during these years some tools to help achieve this goal and to face the lack of public funding.

Case study: DIST – 12/19

Financial Autonomy

Self financing tools - 2/3

Success experience and implementation

- *Research teams of success*
- *Strong research support*
- *Active search for partners*
- *Support to writing new project proposal*
- *Constant monitoring of new opportunities for funding*
- *IPR protection*
- *External advertising*
- *Participation to European and International relevant conferences and congresses*

Case study: DIST – 13/19

Financial Autonomy

Self financing tools - 3/3

In order to avoid any inconvenience and to encourage research activities:

- *Attention to any loss damages*
- *Monitoring of the effort of the dep. staff*
- *Planning related to new proposals*
- *Adaption to new requirements coming from the market and the EU and other agencies*
- *Attention to new opportunities*

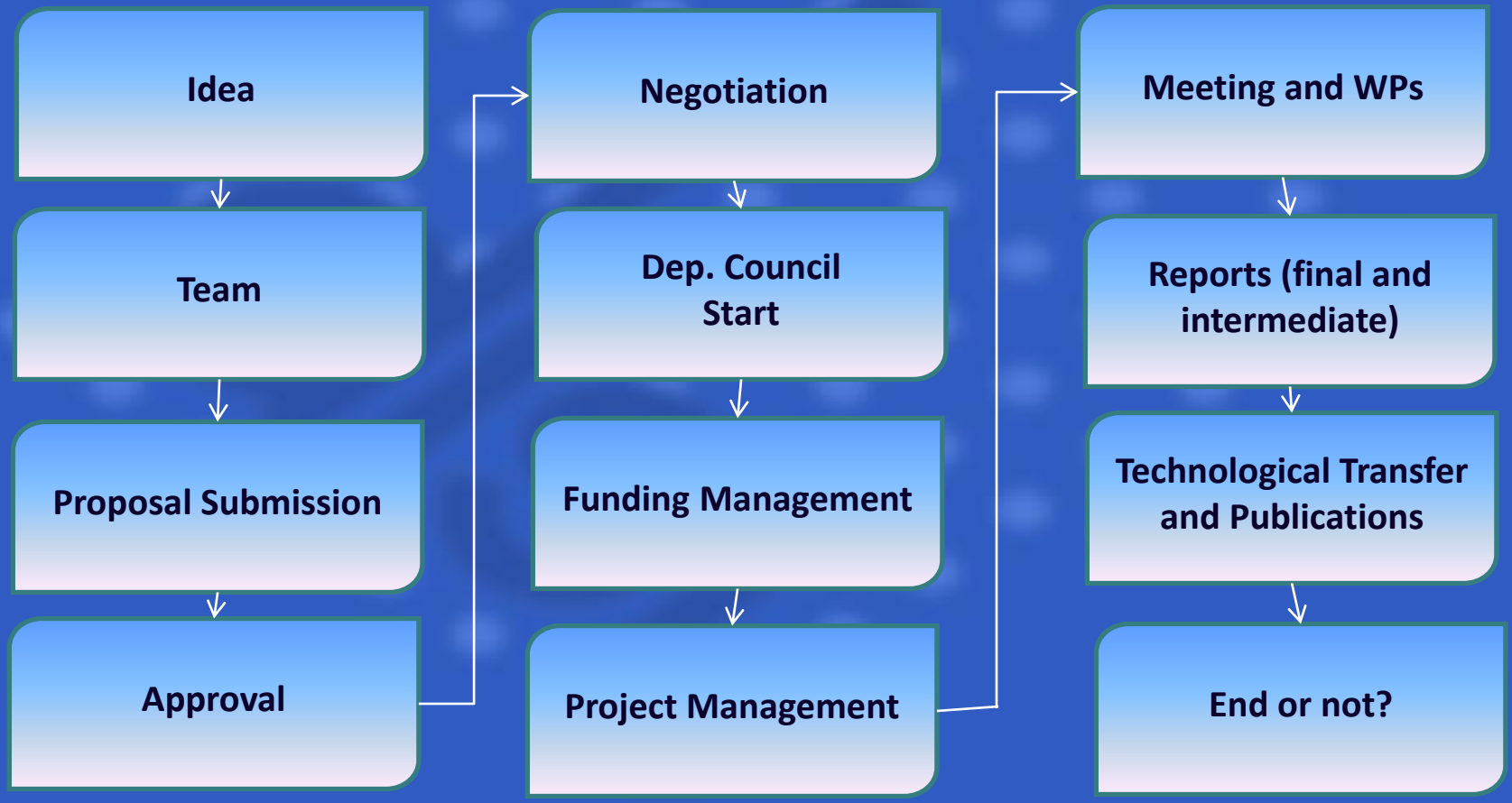
Case study: DIST – 14/19

- *Funding ~ **4.8** M€ per year*
  - *European Community*
  - *National Ministry of Industry, University and Research (MIUR)*
  - *National and International Agencies (ASI-ESA)*
  - *Local Authorities*
  - *Local Scientific & technological Organizations (SIIT)*
  - *Industry*
- *Industrial Projects: **114** (2008-2010)*
- *International and European Research Projects: **20** (current)*
  - *3 as coordinator*
  - *Main typologies: IP , Strep, Marie Curie, Culture, Comenius*
  - *Themes: Infomobility, Musical Interaction, Autonomous and Interactive Robots, Music Performance Experimentation, Underwater Vehicles, Tracking and optimization of hazardous material transport, Diagnostic Enhancement, Human-Robot Interaction, Training through Research Application, Security Architectures …etc…*

Case study: DIST – 15/19

Example No. 1 - Funding

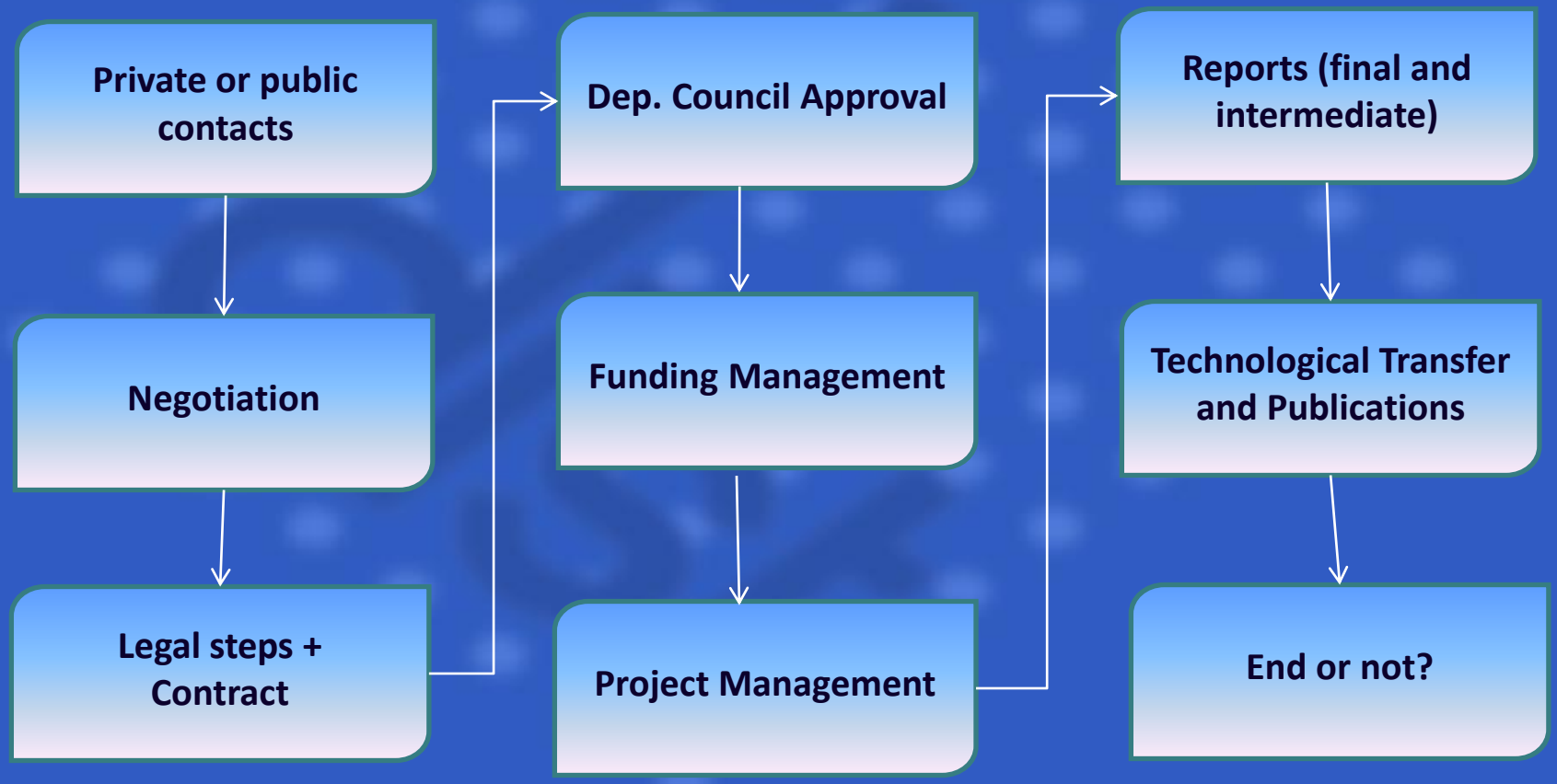
European Project



Case study: DIST – 16/19

Example No. 2 - Funding

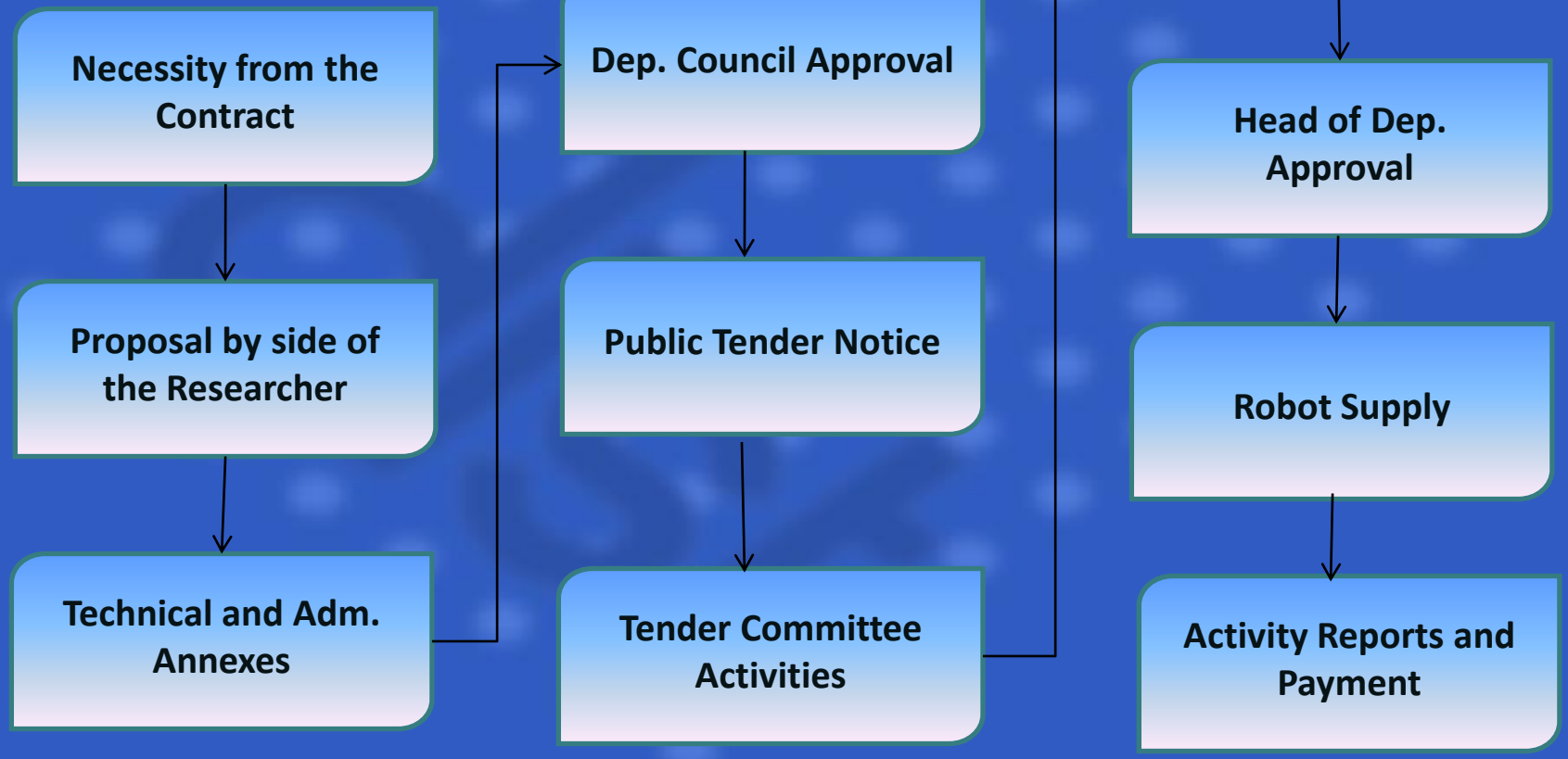
Private research contract



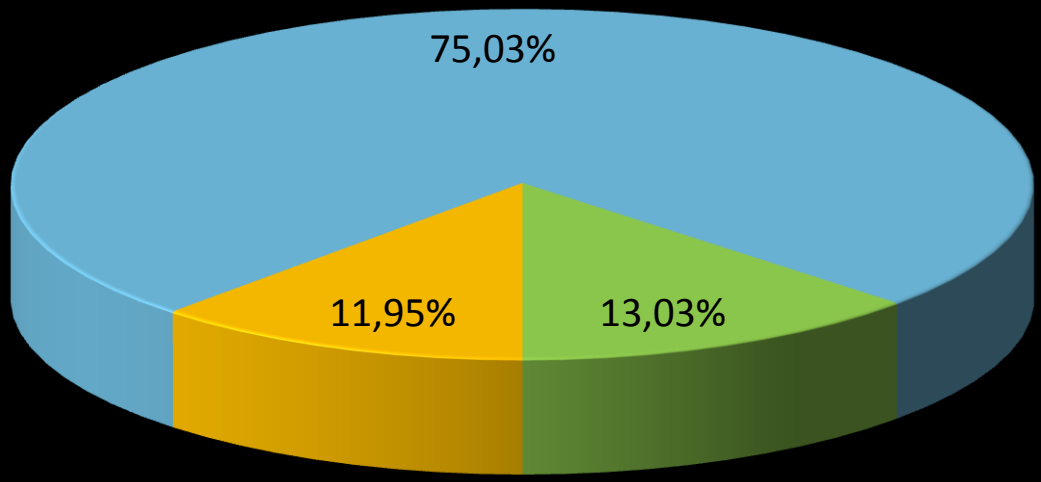
Case study: DIST – 17/19

Example No. 3 – Tender for a contract

Robot supply



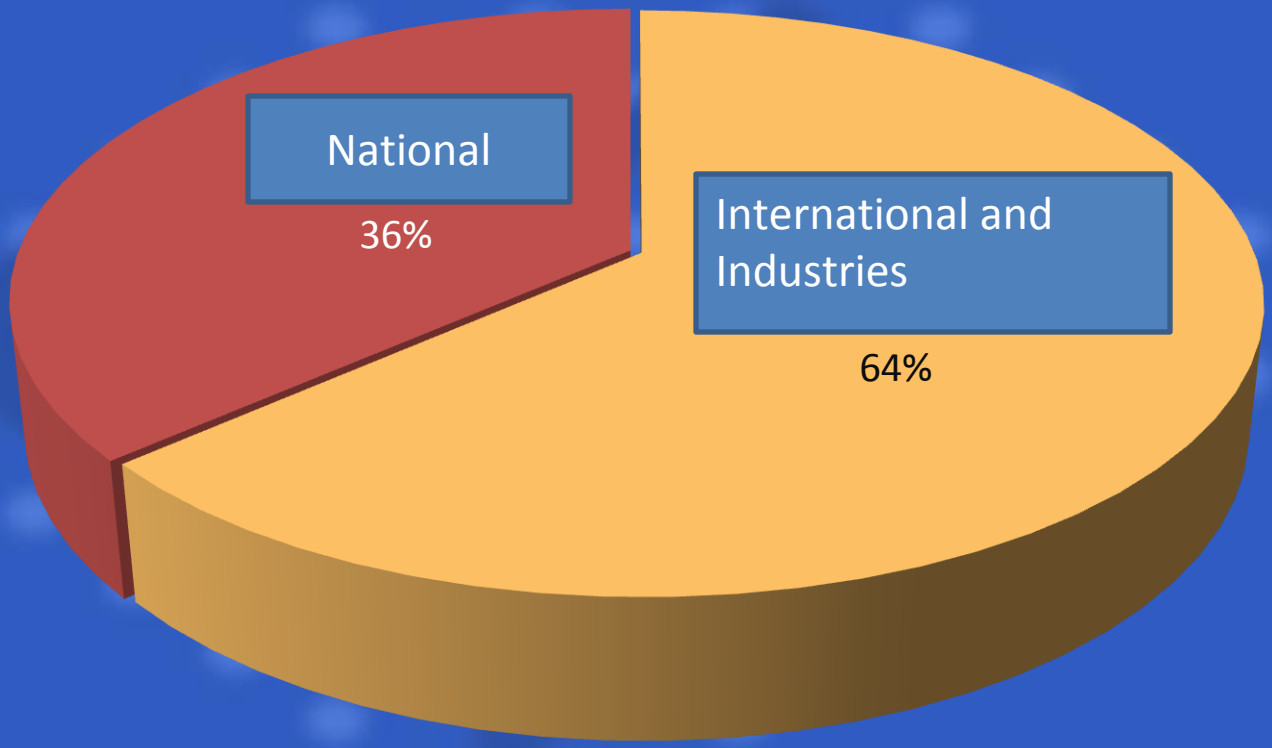
Case study: DIST - 18/19
DIST Budget (year 2010)



- National Research Funding (University, Ministries, National Research Centres)
- International and Private Funding (UE, other International, Industries etc.)
- Own Resources

Case study: DIST - 19/19

Research Income (Year 2010)



THANK YOU!

cinzia.leone@unige.it
lorella.vongher@unige.it