III PhD Conference on Technology Assessment

How the decision making process is made in Radiology:
a TA approach

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Introduction

❖ HTA – importance

❖ Portugal does not have HTA tradition (except for pharmaceutical products)

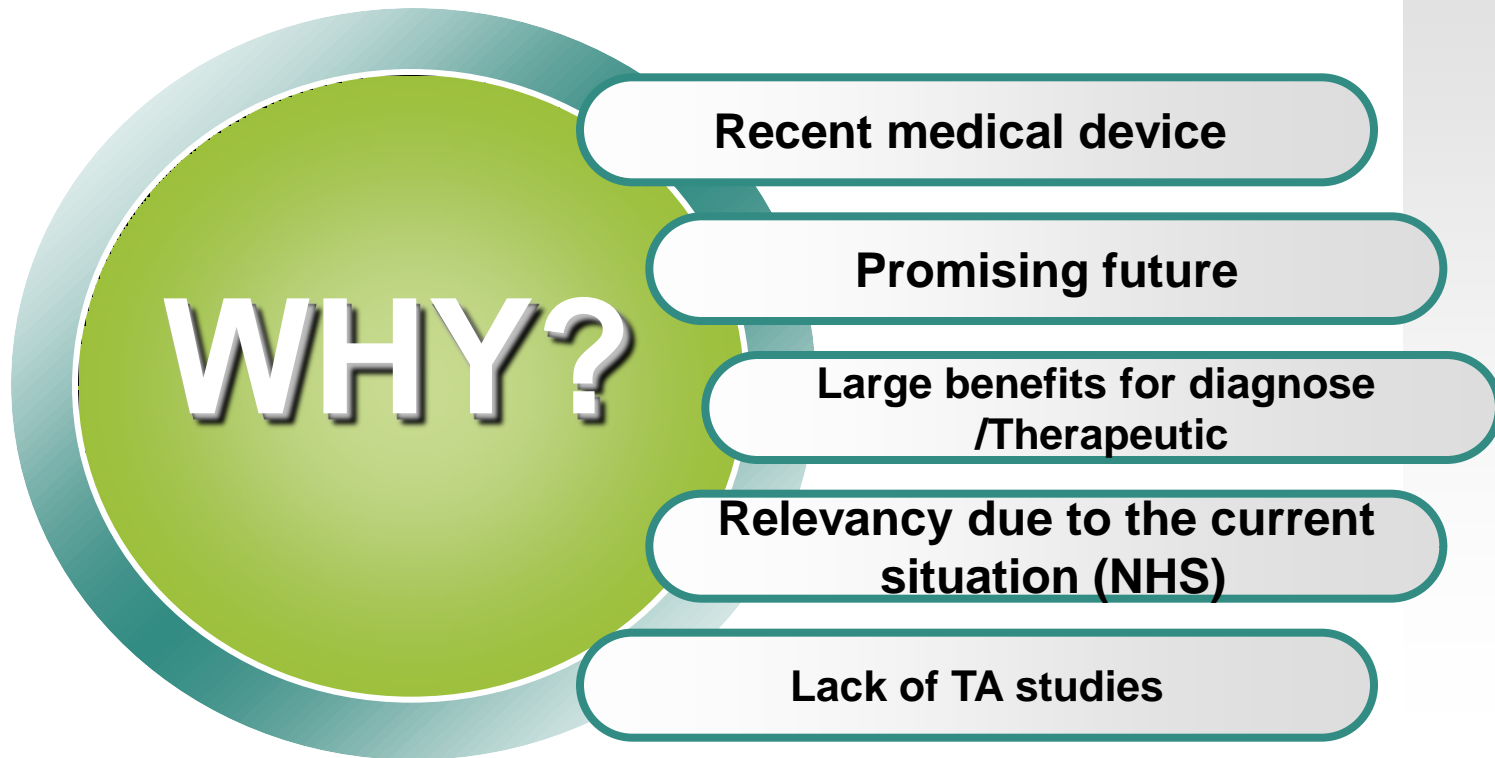❖ Medical Devices - There are currently no effective methods for regulating the distribution (private sector)

Lack of research in the field ➡ **Thesis importance**

❖ Medical Device - Magnetic Resonance

WHY?

- Recent medical device
- Promising future
- Large benefits for diagnose /Therapeutic
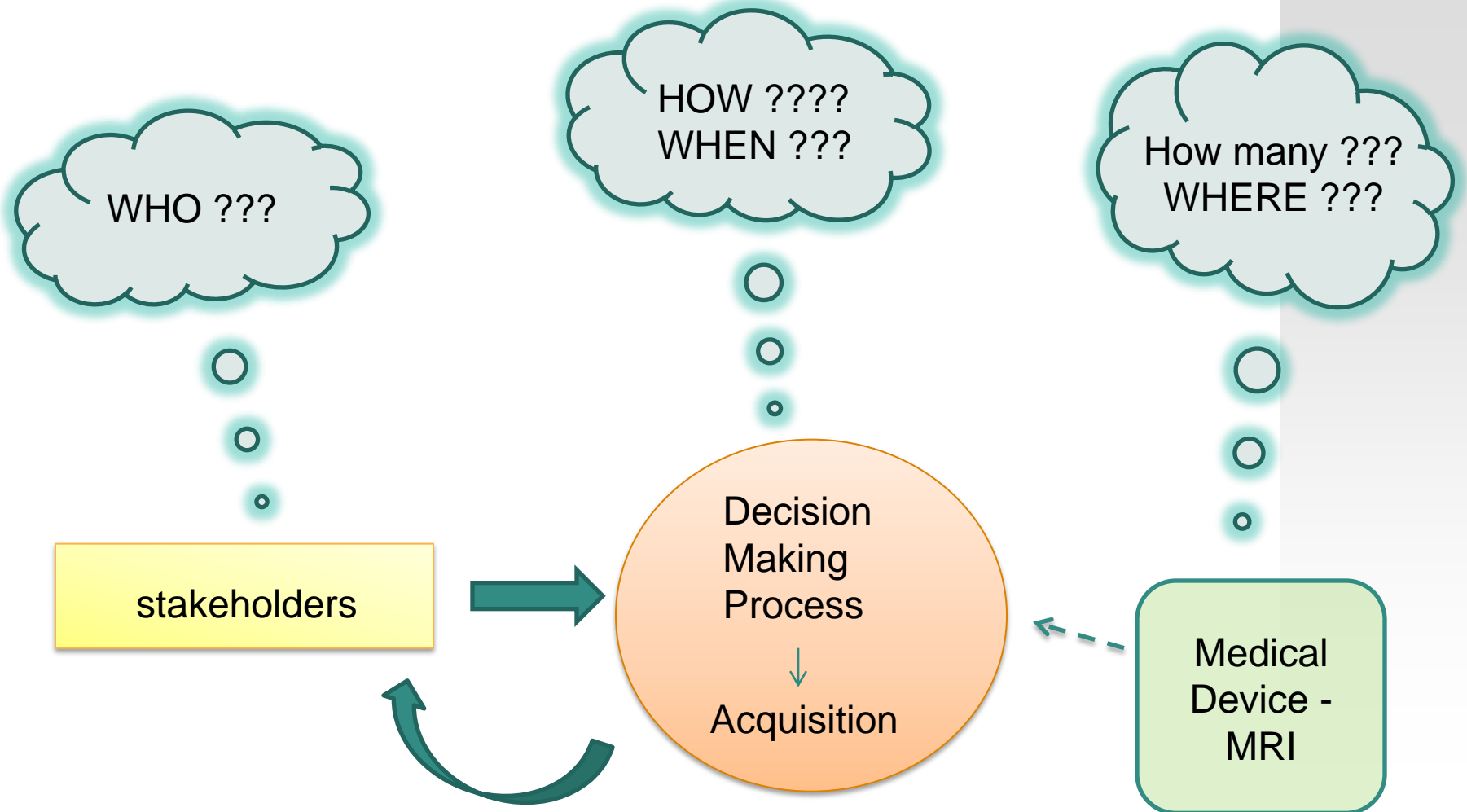- Relevancy due to the current situation (NHS)
- Lack of TA studies

- Properties
  - Impacts
    - Effects

- Direct, intended consequences

- Indirect, unintended consequences

Introduction

7

1. Characterization Form

Baseline Information on MRI installed capacity

- ✓ Data collection (Maia, 2011)

- ✓ Contact with companies

- ✓ Document research

  - Web pages from Hospitals, Clinics...
  - International agencies reports (HTA), WHO, OECD, EUnetHTA...
  - National agencies reports DGS, ACSS, ERS...

1. Technological Park - MRI

A. Number and Characterization of MRI Units

B. Geographic Distribution

Preliminary Results

Firm	Sector					
	Public		Private		Total	
	nº	%	nº	%	nº	%
GE	?	?	?	?	30	22
Hitachi	1	4	4	5	5	4
Phillips	11	42	26	31	37	27
Siemens	13	50	46	55	59	42
Toshiba	1	4	6	7	7	5
Esaote	0	0	1	1	1	1
TOTAL	26	100	83	100	139	100

Geographic Distribution

🟢 Public Sector

🔴 Private Sector
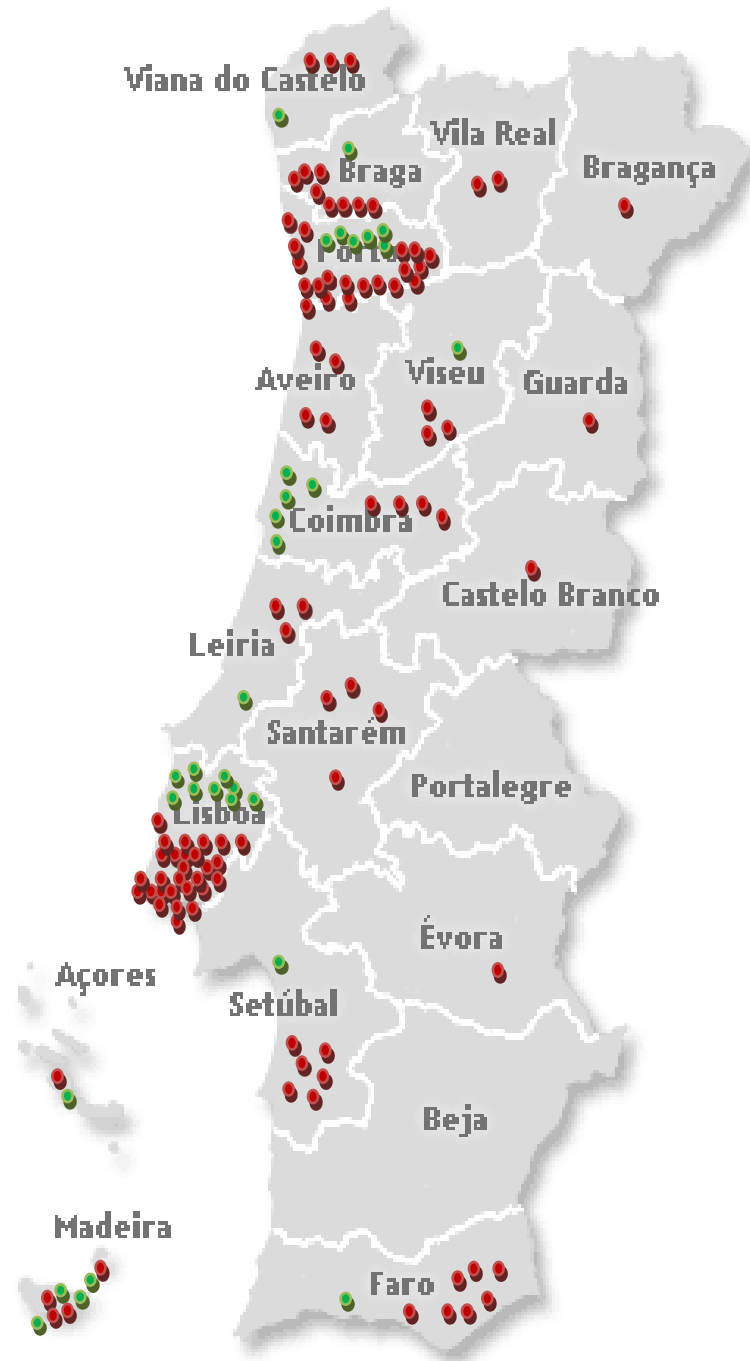
2. Questionnaire "Competences"

How to do
Tecnical and Professional Competences

COMPETENCES

Knowledge
Theoretical Knowledge

How to learn
Cognitive Capacity

How to be
Social and Relational Competences
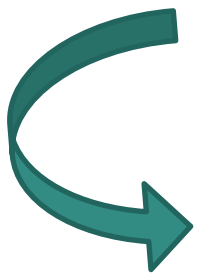
Do tasks Intervene
Work
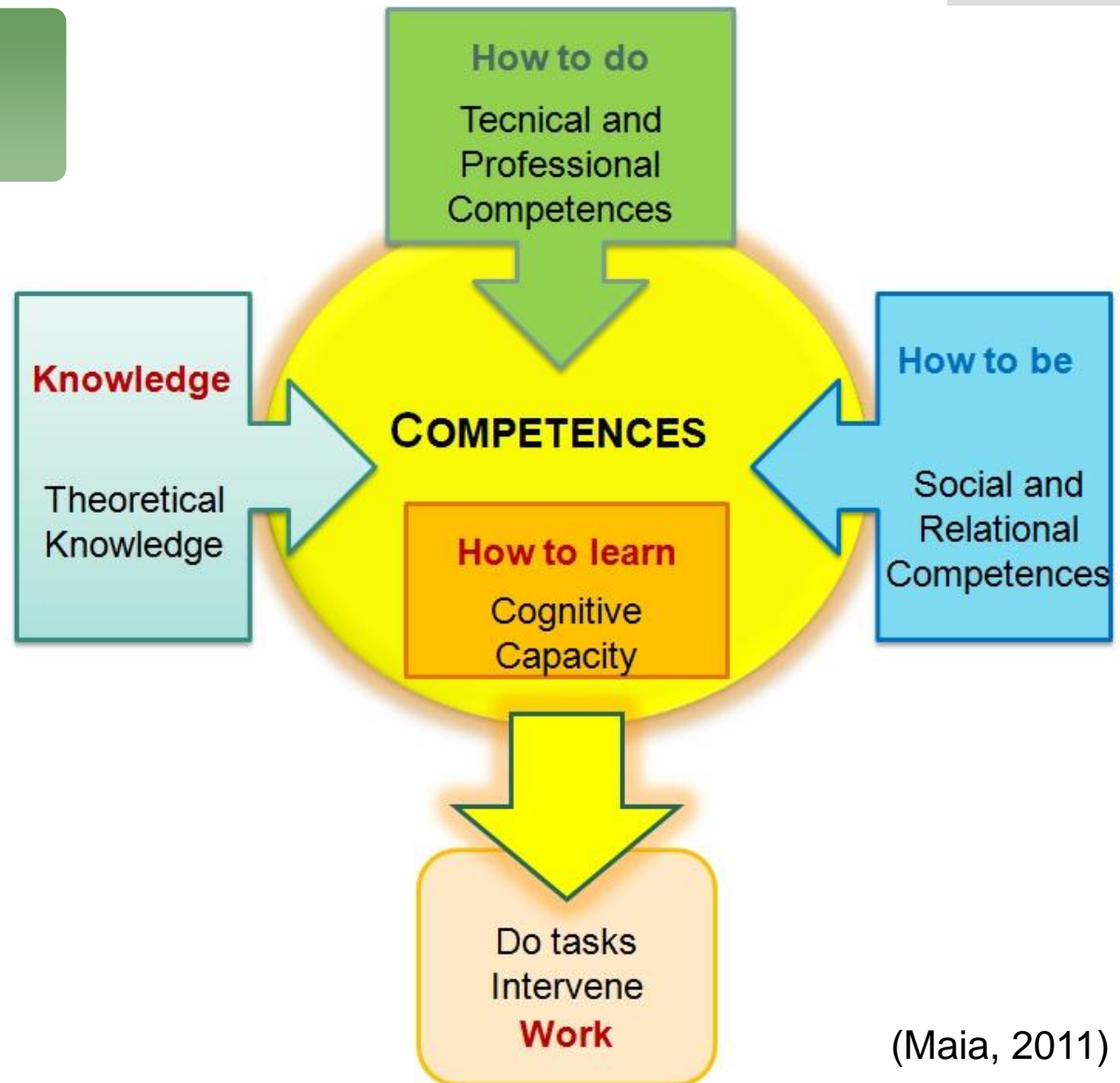
(Maia, 2011)

3. Questionnaire "Decision Making Process"

Total of 137 MRI equipment

Total of 126 Entities

78 entities contacted
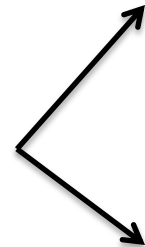
64 on private sector

14 on Public Sector

3. Questionnaire
"Decision Making Process"

Radiology Department

Respondents

- Radiographer
- Radiologist (Physician)
- Technical Assistant (Office)
- Operational Assistant

2. Questionnaire "Competences"

Assistente Operacional 24.1%

Técnico de Radiologia 50%

Assistente Técnico 13.8%

Médico Radiologista 12.1%
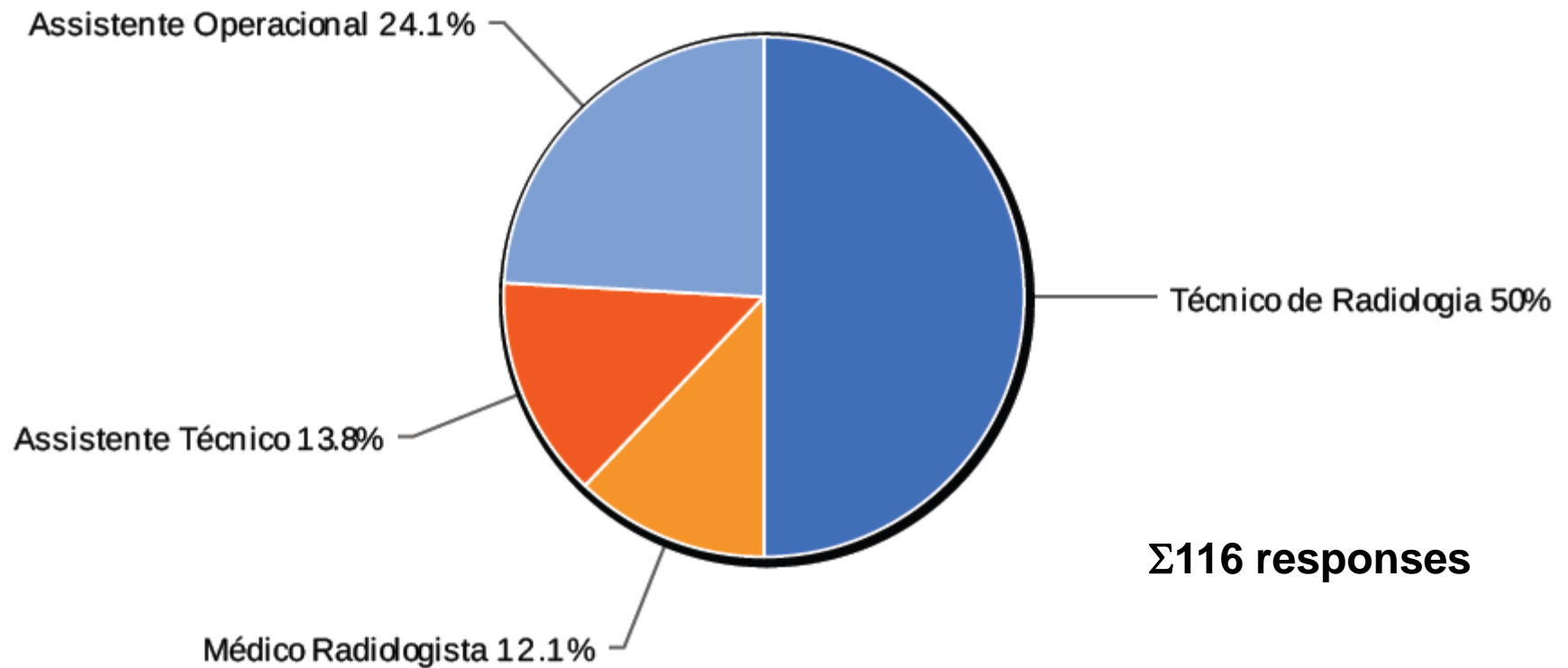
Σ116 responses

Preliminary Results

Σ116 responses

Legend:
- **Radiographer**
- **Radiologist**
- **Technical Assistant**
- **Operacional Assistant**
- **Average**
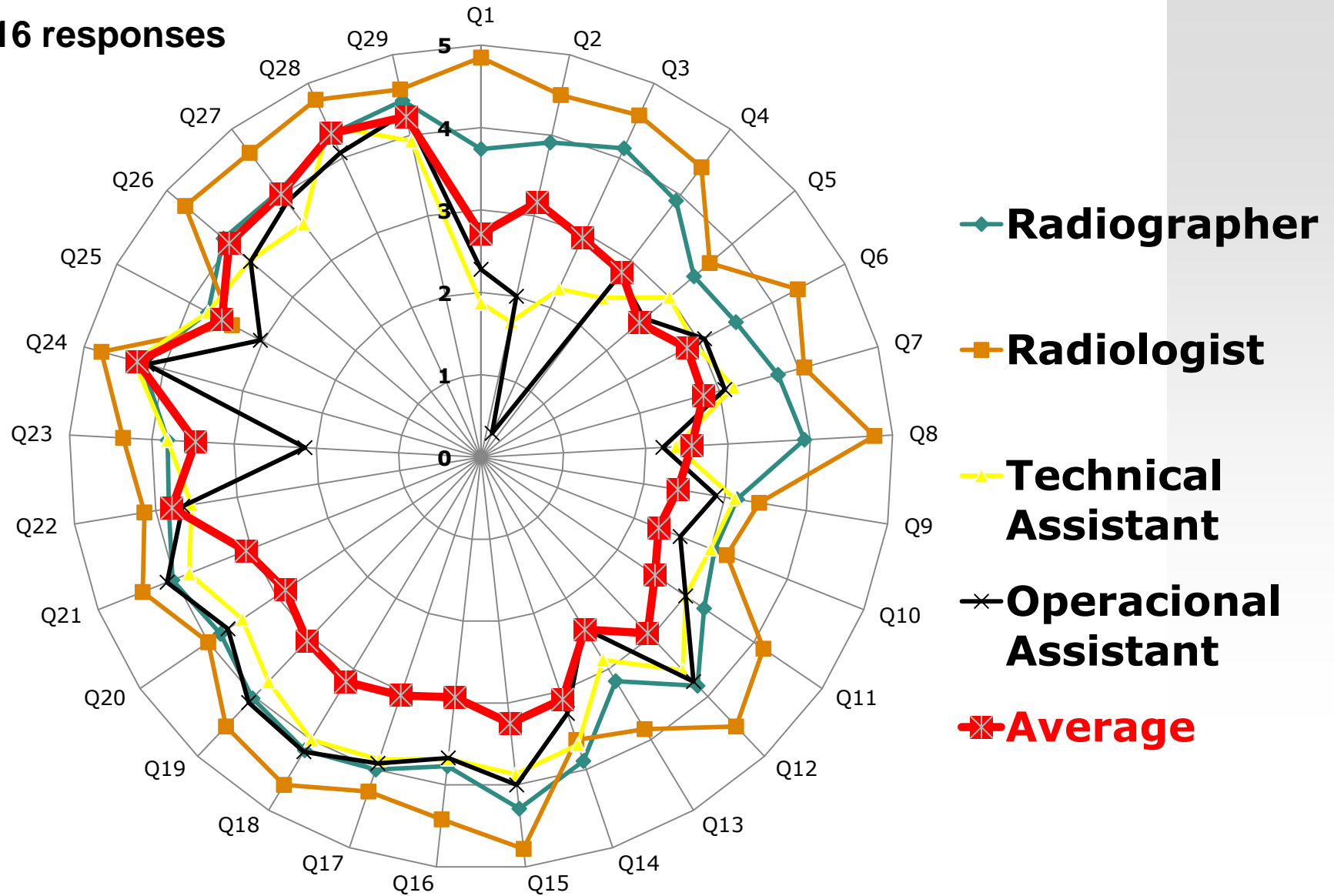
3. Questionnaire
"Decision Making Process"

Q1 – What was the <u>strongest reason</u> for the technology acquisicion

	Public	Private
Expansion capability	**3**	**4**
Competitive action	….	…
Contract expiration	…	…
Leadership change	…	…
Technology development	**2**	**1**

3. Questionnaire "Decision Making Process"

Q14 – Regarding the decision made for the acquisition of the MRI equipment, what is your <u>satisfaction perception</u>, under the perspective of the following?

		1		2		3		4		5		6		7		
		Pu	Pri	Pu	Pri	Pu	Pri	Pu	Pri	Pu	Pri	Pu	Pri	Pu	Pri	
Adminstration	unsatisfactory										1	3	3	1	2	Very Satis.
Clinical Leadership	unsatisfactory								1	1	1	2		2	3	Very Satis.
Technical Leadreship	unsatisfactory									2	3			2	3	Very Satis.
Clinical Staff	unsatisfactory								1	1	1	2	1	2	2	Very Satis.
Technical Staff	unsatisfactory							1			1	2	2	2	2	Very Satis.

Methods

3. Questionnaire "Decision Making Process"

Q15 - Were you <u>the last decision maker</u> throughout the process?
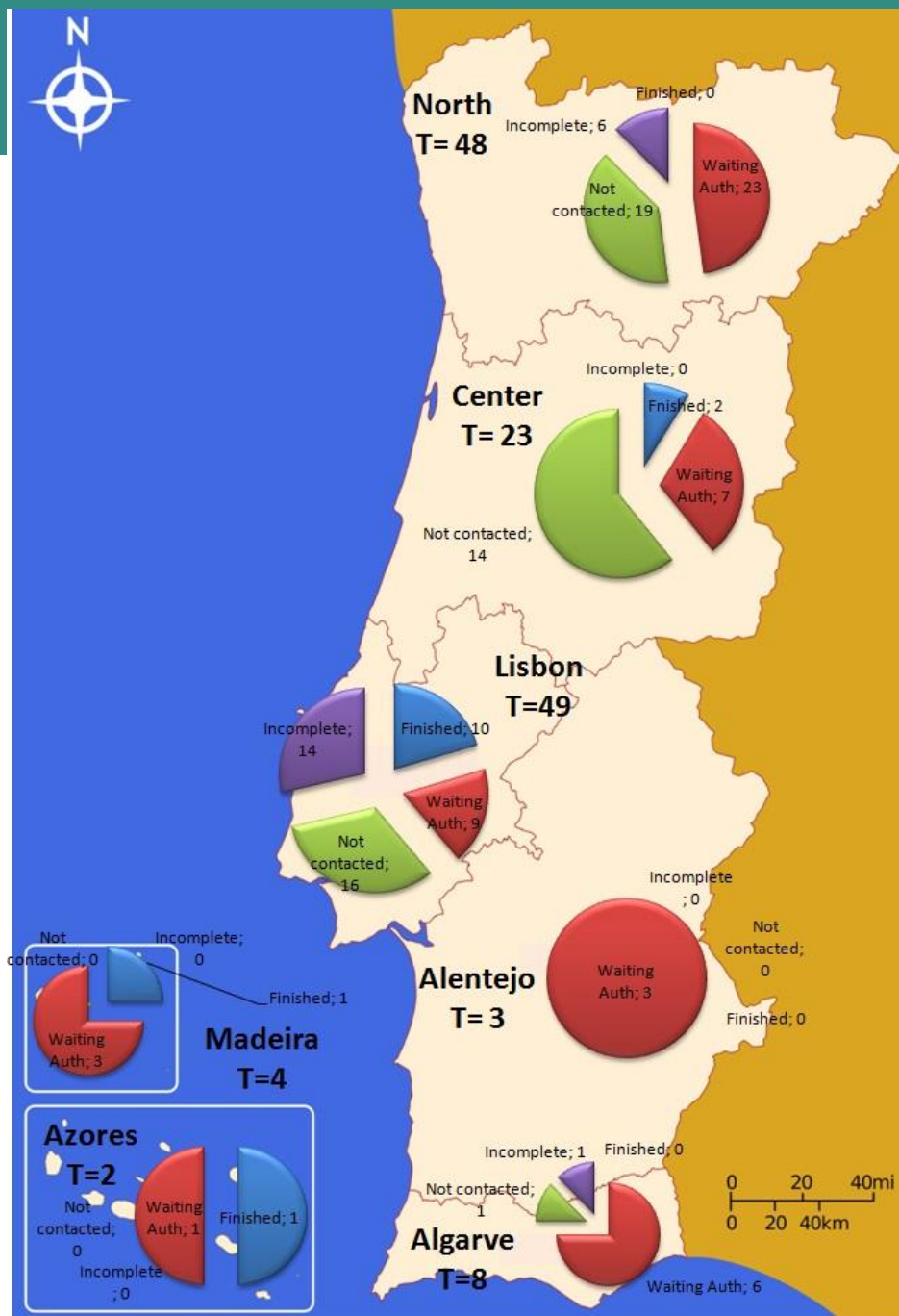
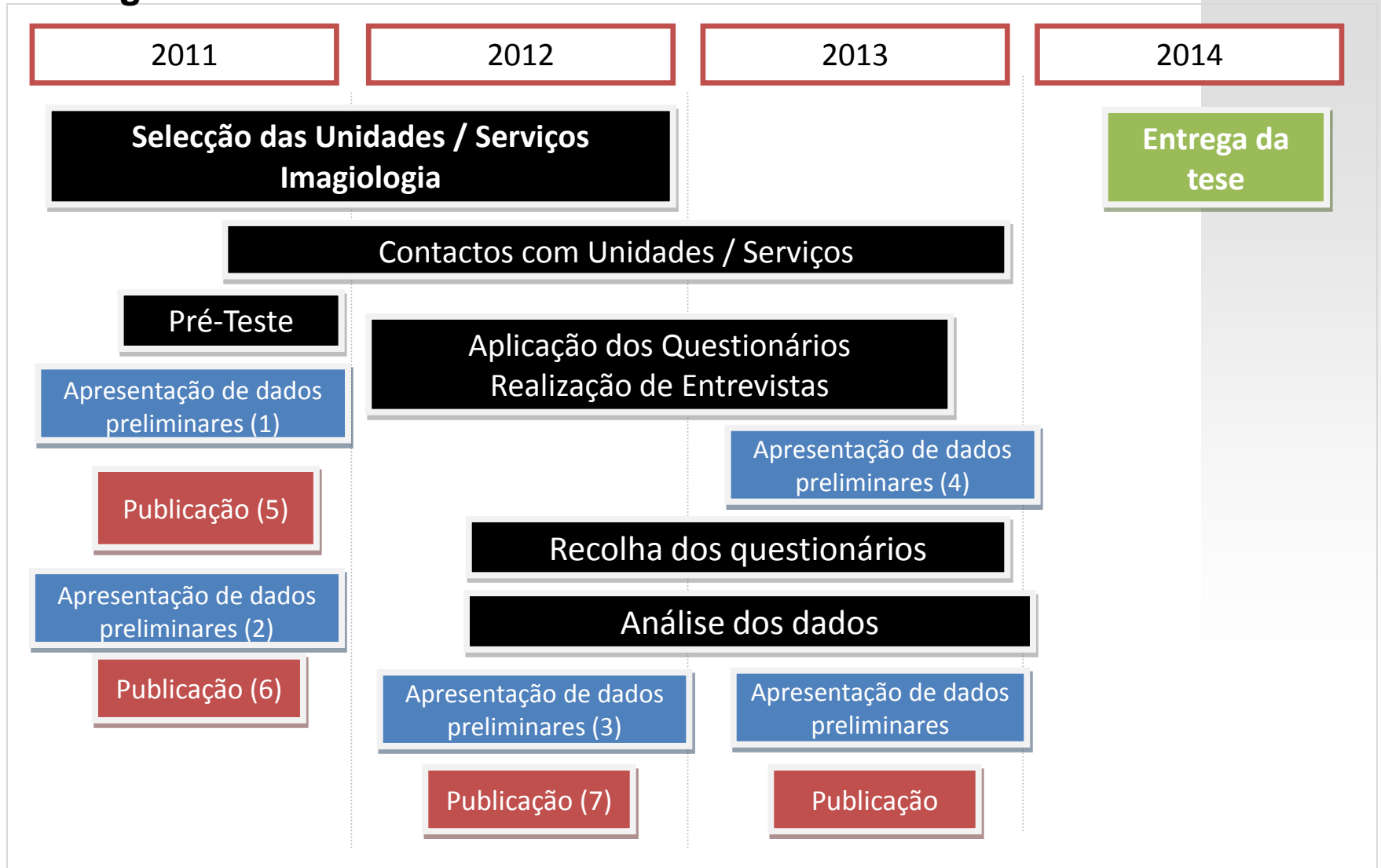| Public	Private
Yes - Department Director	No - Administration Board
No - Radiology Department	No - Administration Board
No - Administration Board	No - Administration Board
No - Department Director	No - Administration Board
No - Adminstration Board	No - Administration Board

Remarks

So far.....

- Finished = 16
  Refused = 3
- Incomplete = 20
- Waiting Auth. = 52
- Not contacted = 49

Remarks

Chronogram

2011	2012	2013	2014

Selecção das Unidades / Serviços Imagiologia

Entrega da tese

Contactos com Unidades / Serviços

Pré-Teste

Aplicação dos Questionários
Realização de Entrevistas

Apresentação de dados preliminares (1)

Apresentação de dados preliminares (4)

Publicação (5)

Recolha dos questionários

Apresentação de dados preliminares (2)

Análise dos dados

Publicação (6)

Apresentação de dados preliminares (3)

Apresentação de dados preliminares

Publicação (7)

Publicação

Limitations...

- ➢ Inexistence of MRI technological park

- ➢ Companies list of MRI localization not updated

- ➢ Time to respond to invitation to participate

- ➢ Time to schedule the interview

- ➢ Time to have all questionnaires answered

- ➢ Working – Student - contacting hours
                                             - lack of time

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and Work Innovation, Faculty of Science and Technology.

Thank You !

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