WP 5—The attractiveness of being an engineer



TÉCNICO

SISTEMAS DE GESTÃO DA QUALIDADE DO ENSINO SUPERIOR | 20 d o de 2010, Instituto Português da Quali

GOALS

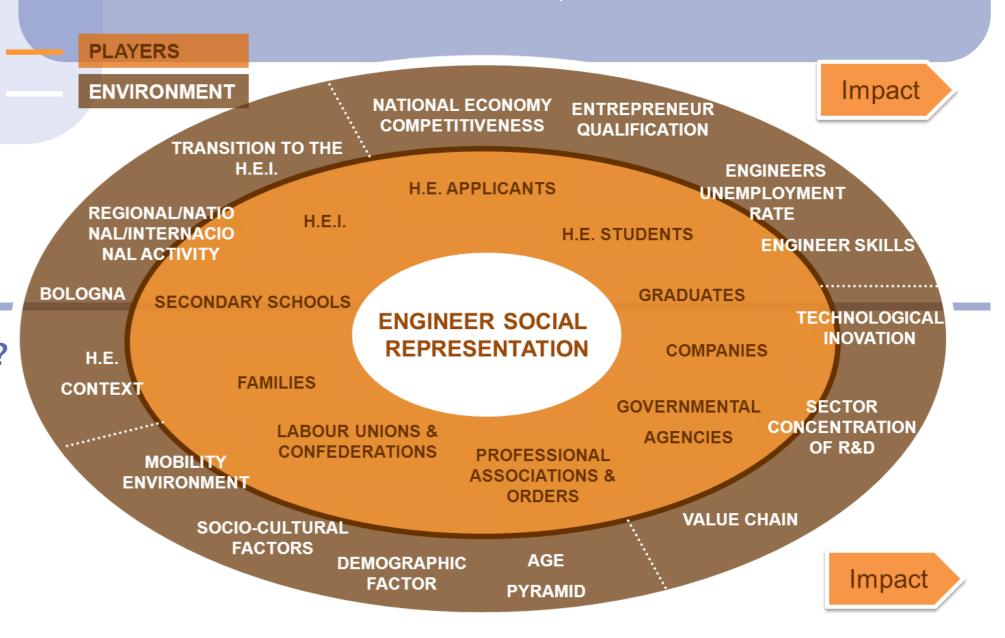
MAIN: to develop the attractiveness of the S&T studies, to formulate a set of best pratices, in order to support the national policies in different partners.

TARGET: to compare the national perceptions on engineers and to identify diferent attitudes between partners

WP5: to make an in-depth analysis of the apparent lack of attractive-

METHODOLOGY

Main source: Online Survey Limesurvey - 13/20 October 2010; Non-Probabilily Sampling - 233 Answers <u>Other sources:</u> www.portugal.gov.pt; www.expresso.pt; Job banking do IST, Percurso Sócio-Profissional dos Diplomados do IST



Recent Results:

HOW DO ENGINEERS LOOK **AT THEMSELVES:**

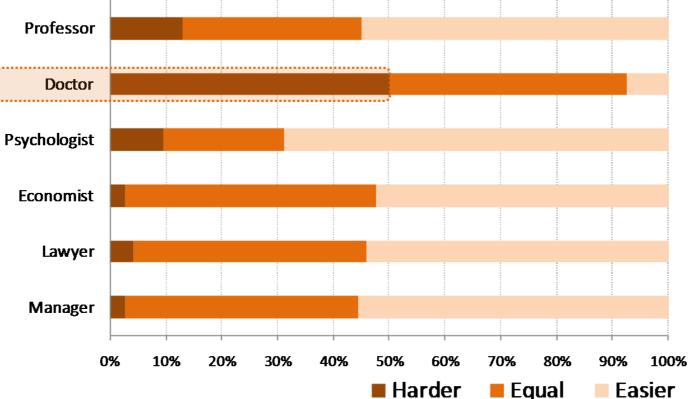
1st Dynamic 2nd Creative 3rd Affirmative 4th Entrepreneur 5th Assertive 6th Curious 7th Efficient 8th Uncomplicated



How other professionals LOOK AT ENGINEERS:

1st Affirmative 2nd Dynamic **3rd Active** 4th Arrogant 5th Confident

IS ENGINEERING HARDER THAN OTHER PROFESSIONS?



SKILLS COMMONLY ASSOCIATED WITH ENGINEERS:

- 1° Versatility/Flexibility
- 2° Analytical capacity
- 3° Accuracy

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

- 4° Entrepreneurship
- 5° Project Management

FACTORS THAT MAY INFLUENCE THE ATTRACTIVNESS OF ENGINEERING IN A PORTUGUESE CONTEXT:

- + High media projection/coverage
- + Family background: parents graduates in S&T motivate children to pursue their studies and careers in the same area
- + HEI's and Government S&T initiatives (ex. Mathematics Routes -UTL)
- + Relative increase in graduates in S&T
- High rates of academic failure/ drop-out in secondary and higher education
- Demographic trend: decrease in younger population
- Soft skills are not enphasized by Pre Bologna study cycles
- Mathematics and Physics: linked "negatively" with the prospective sudents (poor results in the PISA scores)





WEIGHT OF THE ENGINEERING PROFESSION IN POLITICS

(NUMBER OF MINISTERS IN CONSTITUTIONAL GOVERNMENTS): 100%

Not Engineer Engineer 111111111111111111

XVI XVII XVIII Total

35% of the prime ministers were engineers 30% of the overall ministers were engineers

224

V 100 1073

FOLLOWING STEPS

- Combination of data from all involved partners
- Building of a common analysis matrix
- Development of preliminary reports
- Dissemination and suport actions (e.g. ATTRACT website)

Articulation with the other Work Packages:

XII

10

. WP6 - Formal Hinders

XI

11

8

. WP7 - Attracting students to studies in S&T

XIII

XIV

XV

. WP8 - Student Retention



VIII