

Generic Report on Gender Neutral Testings





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Summary of Main Findings

The project partners conducted interviews with the following number of entities:

Country	Number of	Number of	Number of
	interviewed SMEs	interviewed PAs	interviewed PSPEs
Austria	6	2	3
Bulgaria	7	1	2
Italy	5	1	3
Portugal	6	3	3
Spain	7	4	6

As a result of the conducted interviews it was revealed that all three target groups (Small and Medium-sized Enterprises "SME", Public Administration "PA" and Post-secondary Professional Education "PSPE") evaluate both hard and soft skills - the professional and academic competences of the candidates, as well as their personal competences. However, their relevance depends on the target group itself - while PSPE organisations put more emphasis on academic competences, SMEs and PAs focus more on personal and professional competences. Also, considerable differences exist between the partner countries.

On the topic of **how evaluation is done**, it was found that the interview is the most common tool of the selection process, in all countries and in the three target groups. Besides the curricular screening, for **SMEs** the interviews are often the only selection tool used. However, the SMEs case is the one with major variations from country to country. While none Austrian SME complements the interviews with tests, the majority of the Portuguese SMEs use this combined evaluation method. Even when tests and/or other methods are used, interviews are still considered more important in the decision-making process. Also, around 50% of the SMEs have standard procedures for the interviews.

PAs use tests in their selection procedures more often than SMEs. The majority of the interviewed PAs state that there are different kinds of tests involved in the process. However, interviews are still the most valuable tool for evaluation. There are PAs where only interviews are being used, whereas tests are considered insufficient. Nevertheless, there are PAs who consider tests as important and even more important than interviews. There are PAs in which a test determines whether a candidate proceeds to an interview and there are PAs in which an initial interview determines whether a candidate proceeds to a test.

3



PSPEs place a lot of emphasis on academic criteria. Documents and previous experience (diplomas, certificates, titles, publications and attendance on conferences, etc.) are evaluated, to a different extent. Some PSPEs only look for an adequate diploma to be present, some evaluate qualitatively some or all of the other factors mentioned. Tests and interviews are conducted as a method of evaluation. Often the tests work as filters which determine whether the candidate is worth holding an interview with. The procedures vary in the different countries and PSPEs; there are both standardised and not standardised procedures.

The interviewed entities mentioned the following unmet needs, related to testing:

- more specific tests, corresponding to a specific position;
- tests for evaluation of social and emotional intelligence;
- availability of standardised tests at affordable prices;

In terms of legal regulations in most of the partner countries **intelligence and personality tests** may be applied - or at least interpreted - only by accredited psychologists. The use of standardised tests is restricted by either smaller availability of tests, high prices or the need for the interpretation to be done by psychologists.

The main findings of the report lead to the conclusion that in order to better correspond to the project target groups' needs, not only performance tests should be developed, but a combination of selection tools.



Introduction

The project: GeNeus is a 2-year project funded by the European Commission - Erasmus+ Strategic Partnerships for Vocational Education and Training, which aims at reducing gender inequalities in selection evaluations. Six partners from five different countries (Austria, Bulgaria, Italy, Portugal and Spain) are collaborating on this project, working together on the development, promotion and mainstreaming of a Set of Matrices of Gender Neutral Testings. The lifecycle of the project includes different phases which aim at improving the selection evaluations, focusing on gender equality in the labour market and in the professional education.

This document is the first Intellectual Output of GeNeus project, the Generic Report on Gender Neutral Testing.

The report objective: The objective of this report is to compile national information on testing systems in use, recheck them regarding gender specific differences in the individual performance areas - define the specific needs for equal opportunities of access for both genders. Another objective is to identify possible existing best practices in different countries providing an overview over the way and extent to which the target groups in the partner countries use testings – this may be selection tools or performance testings. The aim is to deliver a reflection on the future of the labour market, taking into account the macro context of flexibility and insecurity that will have consequently an impact on jobs and careers.

The report also contains desk research on theories on intelligence and gender specific differences and neuropsychological science.

Testings help companies to identify the candidates most likely to perform well on the job.

Within the national research partners researched selection testing for employees/trainees that is being currently performed in their countries and the needs of the target groups in this area. All partners have made research interviews in three predefined groups.

Researched groups and their specifics:

SME researched group of GeNeus - Focus of the research within this group was both on the selections of candidates for a job or for training (in case SMEs offer training services).





Public Administration researched group of GeNeus - Focus of the research within this group was on the selection of candidates for training, consultancy or other services, provided by the public administration.

PSPE (Post-Secondary Professional Education) researched group of GeNeus - Focus of the research within this group was on the selection of candidates for education by the PSPE organisations and if considered relevant by the PSPE organisations also on the selection of candidates for a job.

Summary of the research done in all partner countries is shown in the table below and explained in details in the following report.

Table 1 | Summary of all entities from the 3 research groups

Competencies	Number of entities that consider it		
	SMEs	PAs	PSPEs
Professional	26/31	11/11	10/15
Academic	20/31	10/11	11/15
Personal	30/31	10/11	11/15

All detailed information per country is attached in Appendix 1 to this Report.

Part A - Researched Groups

I. SMEs

Table 2 | Number of interviewed SMEs/representatives of per country

Country		Number of SMEs interviewed
1	Austria	6
2	Bulgaria	7
3	Italy	5
4	Portugal	6
5	Spain	7

What do SMEs evaluate?

<u>Summary</u>

SMEs in all partner countries evaluate both hard and soft skills, a.k.a. the professional and academic competences of the candidates, as well as their personal competences. Which of them are considered more important depends on the country. For example in





Italy and Portugal personal competences are seen as more important, whereas in Austria the emphasis is on academic and professional competences.

Academic and professional competences are evaluated through certificates, diplomas, CVs, job references, etc. In addition IT and language skills are important factors for SME's. Portugal states specifically English skills as crucial. In 4 of the partner countries professional experience is also very valuable (Austria, Bulgaria, Portugal and Spain), while in Italy personal competences are considered more important.

Important personal competences are mathematical intelligence, logical and spatial reasoning, IQ and social and emotional intelligence. Key aspects to the latter are creativity, self-knowledge, emotional control, self-motivation, ability in interpersonal relationships, empathy and team-work. The personality of the candidate is considered equally important, being perceived through personal appearance/impression. This is judged on the basis of their posture, self-esteem, self-image, extraversion, proactivity and sociability. Concentration capability (Italy and Spain), verbal and communication skills (Austria and Spain), organisational skills (Austria) and professional goals (Bulgaria) are other aspects that are being evaluated by SMEs.

Country Specific results

<u>Austria</u>

In the interviews were obtained the following results:

The data which organisations want to obtain in a selection process are:

- 1. certificates, diplomas, education proofs
- 2. CV
- 3. job certificates
- 4. job experience information
- 5. skills and attitudes
- 6. organisational skills (planning)
- 7. communication skills
- 8. visual orientation
- 9. personal appearance/impression

The first four points are used in all organisations. The last four depend on the specific area in which people work. Sometimes communication skills are considered more important, while in professions like architecture, logically, there is an emphasis on visual





orientation. Therefore it can be concluded that not only certificates and the education and its accreditation play an important role, but also job experience and its duration. Also teamwork and stress management are considered important, less importance is attributed to mathematics and memory. IT-skills are also an important factor for SMEs.

Bulgaria

What is sought among candidates is the professional experience candidates have and what skills accompany it. The candidate's performance is judged mainly on what they have worked before and how they present themselves in the interview. Another recurring topic is the candidate's professional goals, mainly because companies want to measure whether the person wishes to learn and improve.

Italy

Concerning what experts in Small and Medium-sized Enterprises analyse when hiring personnel, two out of five consider academic competences, four out of five consider personal competences and two out of five considers professional competences.

Three out of five consider concentration capability to be a key aspect when hiring someone and mathematical and emotional intelligence is also considered by one of the 5 interviewed to be core in the hiring process.

Table 3 | Result from researched SMEs in Italy

Type of competence	Number of companies that consider it
Academic competences	2/5
Personal competences	4/5
Professional competences	2/5

Portugal

In what concerns the field assessed by the six entities, the following results were obtained:

- All companies evaluate competencies, namely professional (five out of six) and personal (all entities), whereas academic ones are evaluated by only one organisation.
- Intelligence is considered by only one of the organisations, which evaluates the logical and spatial reasoning.
- Social and emotional intelligence is evaluated by four of them. Competences like self-knowledge, emotional control, self-motivation, interpersonal relationships and empathy are taken into account.





- The personality of the candidates is assessed by all SMEs interviewed through characteristics such as posture, self-esteem, self-image, extraversion, proactivity and sociability.
- IT skills and written and oral communication in English are additional fields identified by the companies.

Table 4 | Criteria for the evaluation frame of reference

Professional experience	Match between personality and organisational culture	Qualifications
English communication skills	Personality – strong, autonomous and positive; Motivation and dedication to work and learn	Social competences
Soft skills Technical competencies		npetencies

Spain

The responses provided by the 7 SMEs indicate the following situation: 100% of the SMEs assess professional, academic and personal skills. The former includes teamwork. In addition, they evaluate verbal aptitude, concentration, creativity, emotional and social intelligence and personality. Some organisations distinguish between hard and soft skills profiles. Professional: hard profile; Academic: hard profile; Personal: soft profile. These skills are looked into to find out if the candidate is ideal for the position. There is analysis of hard skill profiles (CV: education, languages, work experience, IT skills and other relevant knowledge) and soft profiles (skills and competences that are essential for adaptation to both the position and the work environment). In terms of cognitive skills, insight is sought into general intelligence, IQ, logical reasoning as well as verbal, numerical and spatial content. The responses provided by the SMEs show that they assess hard skills i.e. professional and academic, as well as soft skills i.e. personal skills.

2. How do SMEs evaluate and select candidates?

Summary

SMEs use different methods for evaluation and selection of candidates. Interviews are the most common one, present in all partner countries. They are often the only





evaluation tool used, but they can be complemented by tests, role play, interactive tasks to be performed at the moment or as "homework", short work trial periods. All these tools are combined differently in the individual countries and SMEs. For example, none of the Austrian, but the majority of the Portuguese SMEs, use tests. Even when tests and other methods are used however, interviews still weigh more.

Around 50% of the SMEs have standard procedures for the interviews. Most of them hold individual interviews, only 2 of the Portuguese SMEs mention group interviews. The interviewer generally wants to get to know the candidates throughout the interview, as well as evaluate their suitability for the position. Important factors are teamwork, ability to work under pressure, technical competences, academic background, know-how and professional experience and the reactions of the candidate. Three of the partner countries (Austria, Bulgaria and Portugal) report that interviews are preferred because of their more personal character. This means that the personal impression the candidate makes is very important.

Examples of questions / topics commonly addressed to the candidates during the interviews:

- Professional and/or academic path
- Personality and self-knowledge:
 - o Strengths and weaknesses?
 - O Why do you want to do this job/why did you choose this career?
 - o How do you define yourself?
 - o Willingness/Intentions to learn?
 - O What are your ambitions/plans for the future?
 - O What would be the ideal job/team work?
 - What are your motivations? How do you motivate yourself and your colleagues?
- Personal interests
- Salary expectations
- What do you think you can contribute to the company?
- If the person is prepared or not to perform the duties required
- Personal and linguistic skills
- Technical competences
- Personal data
- Do you have a family?
- Availability to travel
- Personal values
- What made you choose this career path? In hindsight, would you make the same choice?





- Why do you think you are the best candidate for this position?
- What was your reason for leaving your last position?

3 of the 5 partner countries (Bulgaria, Portugal and Spain) report the usage of tests as an evaluation tool. Written or oral tests in English are used in 50% of the interviewed SMEs in Portugal. Intelligence tests are used in Spain and Portugal to evaluate logical and spatial reasoning. Both in-house and standardised tests are being used, but the majority of the reports show that the standardised are more common.

Other methods that are used are:

- Analysis of the documents (CV, etc.)
- Role play/ Simulation games (i.e.: gather a couple of the applicants and assign them a task to see how they will solve it)
- Homework (The applicant is given a task to deliver work similar to what it would be expected of them if they were to be a part of the company.).
- Job Trial.
- Individual test, 'in basket' in which a real situation is given to the employee.
- Presenting a work plan.
- Tests of whether a person is able to use know-how or work related tools.

All these methods are used to evaluate teamwork, numerical reasoning and problem solving, spatial reasoning, emotional intelligence, speed, efficiency, error rate and omissions.

<u>Austria</u>

Selection instruments used by the interviewed SMEs are:

- Analysis of the documents handed in;
- Interviews with or without a standardised questionnaire (depending on the size and sector of the SME and the job they are seeking candidates for);
- Job interview all organisations use personal interviews as a selection tool, one is working with a standardised questionnaire;
- Job Trial.

Examples of questions / topics addressed to the candidates during the interviews:

- Education and training;
- Professional experience;
- Personality and self-knowledge:





- o Strengths and weaknesses?
- O Why do you want to do this job?
- o How do you define yourself?
- o Willingness to learn?
- O Where do you want to be in 5 years?
- Personal interests
- Salary expectations
- Questions related to the CV of the applicant or to prior job experiences.

While making job interviews, the interviewer is usually taking personal notes of the conversation.

The following conclusions are made as a result of the SMEs interviews:

- None of the organisations use tests as a selection tool;
- Personal job interviews are the preferred tool;
- If they do more than a job interview, they prefer real life working situations as a short trial to get to know the person better;
- Personal impression has a big importance.

In summary, the process of selection in the five entities occurs as follows:

- Personal job interviews are the most common tool to evaluate job candidates, they
 are either structured by the person conducting the interview or in some cases the
 organisation uses a structured questionnaire and additional questions.
 Organisations prefer interviews as they claim talking to a person face to face
 allows knowing the candidate better. In most cases special skills are necessary
 and therefore they need to ask specific questions and not standardised testing.
- Tests are not used in all interviewed SMEs, they put more emphasis on personal impression and face to face contact. Also as in SMEs the working climate and trust are very important.
- SME organisations have shared that real candidate competences often can only be detected during on the job training.

Bulgaria

The first and most important thing that was found out during the interviews with the 7 SMEs is that during the recruitment process interviews are viewed as extremely important and the way a candidate performs is more important than during tests, which are barely used.





The interview is the primary way that candidates are evaluated. This is due to the more personal side of a candidate that can be seen during a conversation. Role-play is also a recurring method used in interviews, with the main goal behind it being to get a glimpse of how the candidate might react during certain situations. An interesting example among some of the interviewed companies is that when possible, they would gather a couple of the applicants and assign them a task to see how they will solve it and whether they would exhibit any teamwork skills.

Three of the interviewed companies stated that tests were used.

In summary the use of tests is not that relevant to most recruiting processes in Bulgarian SMEs and when tests are used they are mostly not standardised. Usually as tests are used fairly simple tasks that are based on general knowledge and do not require special knowledge to complete.

Regarding standard procedures there is a more diverse outcome of answers. 50% of the interviewed companies answer that they have one. The similarities are mainly in the aim of the interviews – SMEs aim at acquiring similar information from the applicants.

In one of the SMEs researched in Bulgaria, tasks for doing at home were mentioned. Usually it is a task to do research on a topic and then to provide a summary of it. With this task it is measured how much of the subject matter has been understood and can be used by the applicant. It is not a very hard or demanding task and can be done fairly quickly; it should not take someone more than 30 minutes.

Italy

In the Small and Medium Enterprises' sector, managers use interviews in the selection process. Hereunder in the table are explained the different types of interviews that are being used by the 5 experts interviewed in Italy.

Table 5 | Detailed information collected in Italy per SME

	• 1
SME 1	 A standard procedure of 4 phases is generally used: Why have you applied for the vacancy announcement? What do you think you can add to the company? Which specific competences would you like to develop in a future? Where do you see yourself in 5 years' time?
	Teamwork is considered really important for them while interviewing.
SME 2	During the interview, based on the CV, questions are asked regarding the university path to verify if the candidate has the technical competences related to their academic background.



SME 3	The <u>first part</u> of the interview is a personal interview. It is important for the interviewer to understand how the person introduces him/herself and which reasons push him/her to apply for the position. The <u>second part</u> of the interview relates to their professional and academic path (so both university and work). The <u>last part</u> of the interview refers specifically to the position advertised in order to see if the person is prepared or not to perform the duties required.
SME 4	Usually the questions are simple and relate to the academic and professional background. Another part of the interview is related to the ambitions of the person and the reasons why that person hasn't already achieved them.
SME 5	The interview has a first phase, characterized by a telephone discussion, followed by a face to face interview. The first type of questions are related to the CV, whilst the second type of questions regard personal and linguistic skills, and the third type is related to the specific position the person has applied for. Sometimes a written test can also take part, verifying the specific requirements of the position.

Portugal

Regarding the selection instruments used by the six entities, the following results were obtained:

• All entities use interviews as a selection tool, more exactly individual interviews (only two entities use sometimes group interviews). However, only three of them have a well-structured script.

Examples of questions / topics addressed to the candidates during the interviews:

- Personal data
- Education and training relevant to the function
- Professional experience
- Personality and self-knowledge:
 - Strengths and weaknesses?
 - What would be the ideal job/team work?
 - How do you define yourself?
 - What are your motivations? How do you motivate yourself and your colleagues?
 - Willingness to learn?
- Personal interests
- Salary expectations





- Availability to travel
- Availability to start functions

Table 6 | Criteria for the evaluation frame of reference

Professional experience	Match between personality and organisational culture	Qualifications
English communication skills	Personality – strong, autonomous and positive; motivation to work and learn; work dedication	Social competences
Soft skills	Technical competencies	

- Four entities use Tests as a selection tool. However, for three of these, tests are English written or oral ones. Only one entity, claims to conduct intelligence tests (bought from SHL) in order to assess the logical and spatial reasoning.
- Role Plays (individual or group dynamics) are used by three of the entities as part of the selection phase, nominally the HR consultancies) and the IT company.

In summary, the process of selection in the six entities occurs as follows:

- One entity only uses interviews to evaluate its candidates.
- Two entities combine tests and interviews in order to evaluate their candidates.
- One entity combines interviews and role play in order to evaluate their candidates.
- Two entities combine tests, interviews and role play.
- Concerning tests, those are done only to assess the logical and spacial reasoning.
 Nevertheless, "only 2% of clients request it."

All of the interviewed expert agree that interviews are the most valuable tool for their selection processes, more than tests or any other tool. Since interviews are done face-to-face, the interviewers feel that they are able to get to know the candidates much better than by using a test. When other instruments are used, it is only as a complement to the interview.

At the same time, the interviewees' majority states that it would be important to include performance and aptitude tests in order to make their selection processes less subjective.

Spain





Of the seven SMEs interviewed, three use intelligence tests as an assessment and method for candidates; two use standardised tests and the other use both in-house and standardised tests. Assessment is done by means of intelligence tests, professional knowhow and others:

- Individual test, 'in basket' in which a real situation is given to the employee.
- · Presenting a work plan.
- Tests of whether a person is able to use know-how or work related tools.
- Logical reasoning: verbal analogies, numerical series and logical matrices.
- Verbal content: verbal analogies (verbal reasoning) and completing sentences.
- Numerical content: numerical series (numerical reasoning) and problem solving (numerical problems).
- Spatial content: logical matrices (logical reasoning) and fitting shapes (spatial orientation).
- · Emotional intelligence.
- Other: speed, efficiency, error rate and omissions.

The most common standardised tests that are used are: IGF-6r, general intelligence, logical reasoning, and verbal, numerical and spatial content. An example of in-house 'in basket' tests: in the middle of an interview the candidate is given a box that contains an IKEA chair (with instructions) to be assembled. The idea is to force the candidate out of his/her comfort zone and to test reactions to an unexpected situation. Observation is made of analytical skills after a period of 4-5 minutes, logical matrix development (logical reasoning), shape fitting (spatial orientation), attitude, speed, efficiency, etc.

When it comes to interviews as a method of evaluation and selection, 100% of the SMEs use them, 4 use standardised procedures, 2 non standardised and 1 in-house procedures plus standardised ones. All of the SMEs did interviews, differing in terms of the professional profile needs required. Thus there are interviews that ask for an account of work experience and supposed contribution to the company. Other types of interviews used are:

information contained therein.

- Interview by telephone: the interviewee receives the call unexpectedly and this forces the candidate out of their comfort zone. Much information is obtained this way and it is the preferred type of interview.
- In depth interviews.

Typical questions for interviews:





- What made you choose this career path? In hindsight, would you make the same choice?
- Would you like to continue studying?
- What qualities would a good ... have?
- What are your likes and dislikes?
- What are your short-term and long-terms goals?
- The client is always....
- What are your strengths and weaknesses?
- Team work, work under pressure.
- Do you see yourself as a leader or a follower?
- Where do you see yourself in five years' time?
- Tell us about what your three best qualities are.
- Tell us about three areas for improvement.
- Why do you think you are the best candidate for this position?
- Tell us about what work you would do for this company.
- What was your reason for leaving your last position?
- What are your remuneration expectations?
- Do you mind travelling? (depends on the position)
- Do you have a family?

Candidates are evaluated according to their responses and the profile is adapted by means of:

- Assessment of know-how, academic profile, training and experience.
- Great importance is given to responses, much information is sought and candidates are encouraged to be as honest as possible. The answers provide an indication of how the candidate thinks and acts and are measured against what is required for the position. Another fundamental factor that is evaluated is attitudes shown, such as nervousness and body language. In conclusion, responses are assessed and whether they are appropriate to the position.

Another selection method has to do with simulation games or role plays. Of the 7 responses given by SMEs, only one used this type of method. The aim of this type of test is that the candidate plays a role in order to ascertain how he/she would act in a given situation. The candidate should not know the objective of the test. Further methods: Of the 7 SMEs only 2 employ other methods. Examples were given for creative positions: 1. the candidate is asked to draw the infinite. These tests assess attitude when faced with challenges as well as the actual response. It is the explanation that is important rather than the drawing itself. These kinds of tests are constantly







changing and the procedure is adapted according to the position offered. 2. Another example given is for security staff. The following are assessed: • Punctuality • Hygiene • Responsibility

Selection criteria: of the 7 SMEs interviewed, only 3 answered this question. 2 of them indicate that more weight is given to the interview while the other insists that the test itself is of prime importance. The order is as follows:

Priority: know-howImportant: experienceSecondary: residence

When interviews are extensive, all aspects are looked at in depth. If a test is done after the interview, the results of the former and latter are compared, but more weight is given to the interview. It can be concluded that the main recruitment methods of the SMEs that were researched are that of intelligence and academic tests, as well as emotional and psychological ones. As far as the interview itself is concerned it can be highlighted that it carries most weight and the other tests are secondary.

3. What needs do SMEs have in this area, which are not met?

<u>Summary</u>

Generally the interviewed SMEs either don't state that they have needs, that are unmet, or their needs aren't connected to standardised testing (Austria, Bulgaria and Italy). Spain and Portugal say that testing would be more useful if specific tests corresponding to a specific position were available. According to the SMEs interviewed in Portugal, tests for evaluation of social and emotional intelligence are needed but not available. Below are shown representative statements from each country about their unmet needs.

<u>Austria</u>

In Austria the problems identified in the application process are more related to finding the right candidates and having sufficient candidates, than to the method used in the selection process. One organisation states that due to missing structure of evaluation, the results are not comparable, especially if different persons are doing the interviews and not all the decision makers have met each candidate.

So SMEs might require better methods which might be a help for a more objective evaluation and selection process, especially in addition to interviews.





Bulgaria

In Bulgaria the SMEs do not express any explicit needs in the field of testing. Mainly there are problems and needs, related to the process of interviewing candidates.

There are concerns about whether generalized interview scores can be used and whether they will be adequate to the position SME is recruiting for. Not being honest about motivation during the job interview has been stated as a major issue. Another interesting point raised is the objectivity of the final result of an interview, as with all evaluations, related to humans there are different forms of biases.

<u>ltaly</u>

All the targets interviewed primarily focus their attention on the main problems or issues met during their selection process. For SMEs these issues are:

- When SME professionals were interviewed, some aspects were highlighted such as the lack of interest from the candidate's part and the fact of being ok with whatever is offered.
- Another issue while interviewing is the tension the candidate confronts when the interview starts having a technical aspect and not just knowledge based.

Portugal

The tests used in Portugal are only associated with linguistic and space-temporal skills, which does not correspond to what companies need to evaluate (especially for services sector). The tests in themselves can be interesting only if they evaluate the social and emotional intelligence (mostly creativity and interpersonal relationship capacity) which is very important for companies but underestimated in tests.

In what concerns the self-assessment of the selection processes in the six entities interviewed, the following results are obtained:

- Improvements can be gathered under three categories:
 - All entities affirm that their selection process is not fully satisfactory.
 - The entities state that it would be necessary to introduce performance and aptitude tests in order to make their selection processes "more objective and less dependent on human intuition". However, these tests would have to be different from those that currently exist in the market, so that they could correspond to the organisations' needs – mostly evaluation of social and emotional intelligence.





 One of the SMEs also places the stress on the need for faster recruitment and selection.

Spain

When it comes to assessment and selection needs that are not currently met 6 of the 7 SMEs provide a response and 5 actually explain that they have no unmet needs. One of the entities expresses the need for technical profile evaluation e.g. for the technical department (installation operators). Concerning whether the evaluation should be improved, only one SME indicates that the evaluation should be improved at a national level, emphasizing contextual know-how and aptitudes for finding the ideal candidate for a position.

4. Gender specifics.

Summary

Most of the SME's state that there are no differences in the selection processes of men and women and in their performance through interviews. However, many SME's either do not respond or say that there is lack of attention to the topic and/or adequate tools to judge if there is a difference. Individual statements worth noting are:

- While approaching job interviews women are more timid and would try to adhere
 to unwritten rules that are not actually there. On the other hand men would take
 more risks (in terms of what they say) and would generally be more positive
 during interviews.
- Women's performances in job interviews are better and more-controlled than those of men. This is due to the competitiveness of women in the particular sector due to the high difference of the percentage of men in the field with regards to women.
- Male line managers tend to choose/select predominantly men to fill the available jobs, as they consider them he most valid candidates.

Austria

None of the SMEs notices significant difference between women and men in their selection process. But this is also due to the fact that there is no specific focus on observing this difference at present and there is no objective tool in use to measure differences. Some SMEs state that it might be interesting to evaluate that fact.





Bulgaria

According to all of the companies there is no difference in the way men and women perform in terms of testing. One of the recruiters shares an interesting viewpoint of how men and women approach job interviews as according to her experience, women are more timid and would try to adhere to unwritten rules that are not actually there. On the other hand, men would take more risks (in terms of what they say) and would generally be more positive during interviews.

Italy

All experts interviewed with the exception of one agree in the fact that there are no gender differences while interviewing men and women for a job. One of the SMEs highlights the fact that women's performances are better and more-controlled than those of men. This is due to the competitiveness of women in the sector as a result to the high difference of the percentage of men in the field with regards to women.

Portugal

In what concerns the gender specifics, the following results are obtained:

- Any SME notices significant difference between women and men, when applying tests;
- The 6 entities agree that some differences exist, and are notable at three levels:
 - The composition of the labour market: some job categories are more feminine and others more masculine. Not exactly because of the selection from the recruiters side, but more because of the availability of men/women in the labour market for the sectors and/or job categories in question.
 - Male line managers tend to choose/select predominantly men to fill the available jobs. One of the interviewed entities declares: "Since the last interview is done by line managers, they are the last who evaluate (and as result select) the candidates. But they tend to consider men as the most valid candidates". However, when asked about gender differences within the organisation, the HR director stresses that "we are not focused on combating gender differences within our organisation, but rather on hiring people with the most appropriate job profile".
 - Women and men have different kinds of characteristics/qualities that can be attributed to gender. Because of that, it is necessary to potentiate those



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gender differences, since they complement each other. One of the entity's representative states: "There is a lack of women in the sector. This means that there is a lack of certain skills in the sector. Women have very important management skills. There is a lack of complementarity regarding management competences of each of the genders. (...) It's necessary to potentiate the gender differences inside organisations: men have more rational thinking, while women have more emotional thinking, team and conflict management".

Spain

Concerning gender specific issues, 4 SMEs respond to the question and claim no difference in performance between men and women. 3 do not provide a response.

II. Public Administration (PA)

Table 7 | Number of interviewed PAs / representatives of PAs

Country		Number of PAs interviewed	
1	Austria	2	
2	Bulgaria	1	
3	Italy	1	
4	Portugal	3	
5	Spain	4	

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While conducting the study within the PA researched group, some of the partners faced the difficulty to reach the number expected, since it is hard to be in touch with PA and have their availability.

1. What do PAs evaluate?

In all countries, evaluation processes in the Public Administration include assessment of the academic, professional and personal skills of the candidates. They all put a lot of weight on the specific skills needed for the specific job. The positive personality is a searched trait in Italy and Austria, although the general attitude of the candidate is important to all. Interest in learning is evaluated in Italy and Spain. Teamwork and networking skills are also important. Other skills that are being evaluated in some of the partner countries are: verbal and mathematical intelligence, memory, concentration, emotional and social intelligence, customer orientation, responsibility.

Austria

In what concerns the fields evaluated by the two entities interviewed, the following results are obtained:

- Specific knowledge: knowledge, skills, attitudes through analysis of application documents and a job interview;
- Professional competences including education and training, academic degree in relation to the job as counsellor (academic training for one organisation is not obligatory, secondary school certificate, apprenticeship certificate also possible);
- Personal competences (soft skills) in relation to attitudes and necessary competences of the Employment service
 - Self-competence: positive attitude and responsibility;
 - Service competence: holistic and networking thinking, customer orientation;
 - Communication competence: relationship management and solution orientatation;
 - Cooperation competence: teamwork and cooperation.
- Mathematical intelligence and numerical intelligence;
- Verbal expression;
- Memory;
- Visual orientation:
- Concentration;
- Emotional, social competence;
- Patterns of behaviour and experiences related to work.





Bulgaria

Regarding the Public Administration target group in Bulgaria, the situation is as follows: all the activities are managed by one state body – Employment Agency. The agency rules and manages institutions in every municipality, named Labour Offices. They have to consult, provide help and guidance to people looking for job, as well as to do initial preselection for organisations looking for employees via Labour Offices. They also provide some training to vulnerable groups. There is a written procedure about how Labour officers have to support young people in search for a job.

Italy

The target group Public Administration tends to evaluate professional competences related to the specific profession or role they are interviewing for. Also in this case, personality is something that concerns them when interviewing for a position in their institutions: a positive personality can upgrade the team's productivity and may boost the morale of the entire staff. Personality is considered important also with regards to learning, it is important for the manager to be able to give critical and constructive feedback and for the person to receive it in a positive and stimulating way.

Portugal

In what concerns the fields evaluated by the three entities, the following results are obtained:

- Competencies, at professional, academic and personal levels are evaluated by all;
- Intelligence is considered by two of the three entities. This criteria is evaluated through aptitude testing on numerical reasoning, verbal reasoning, abstract reasoning and memory on one hand, and general intelligence on another hand;

Social and emotional intelligence is considered important but is not evaluated properly by any of the entities.

Spain

Information was gathered from 4 Public Administrations (PA). They evaluate the following:

- Skills: professional, academic, personal and attitude
- Verbal and mathematical intelligence, memory, concentration, emotional and social intelligence, and personality

information contained therein.

Complementary academic qualifications





- Suitability to the position, training or service
- Life projects
- Interest in project training participation and in learning
- Timetable availability
- Compatibility between personal projects and the training Project in question
- Other: job interest, needs perception in terms of what is required for the position and the relationship between personal interests and that of the job, training or service for which evaluation and section is being carried out.

The responses given lead to the conclusion that the PAs evaluate professional, academic and personal skills in the same manner as do SMEs.

2. How do PAs evaluate and select candidates?

Summary

In all PA bodies interviewed in the partner countries, interviews are being conducted. In the majority there are also different kinds of tests involved in the process. However, interviews are still the most valuable tool for evaluation. There are PAs where only interviews are being used, whereas tests are considered insufficient. Nevertheless, there are PAs who consider tests as important as or more important than interviews. There are PAs in which a test determines whether a candidate proceeds to an interview and there are PAs in which an initial interview determines whether a candidate proceeds to a test. The majority of the PAs have standard procedures for interviews and role play (if used) and use standardised tests, such as intelligence tests, psychological tests, professional knowledge tests etc. Very rarely the tests are personalized and conducted online. The interviews can very rarely be conducted in groups and/or not follow a standard procedure/have a standardised questionnaire. They could however be semistructured. All these methods are used to evaluate the candidate's professional and personal skills.

Examples of questions / topics commonly addressed to the candidates during the interviews:

- What is your motivation to apply for this job?
- What can you tell us about prior job experiences... what were challenges and what did you like to do?
- If the candidate changed their job often, why did they do so?
- Organisational skills





- Leadership style
- What was the biggest challenge you faced dealing with other people?
- What do you require (framework, social conditions) to be able to do a good job?
- Which technical knowledge and experience do you have in the area, which allows you to solve the more complex questions?
- 5 words to describe yourself
- How do you react to a conflict between your colleagues in your service?
- How you react when superiors criticizes your work?
- How do you face difficult situations, pressure?
- How do you evaluate the importance of team work?
- How do you keep motivated, and motivate your team at work?

Table 8 | What do interviews evaluate?

Interest for the function	Self-control	Self-esteem, influence
Flexibility	Self-care	Reasoning capacity
Mode of expression	Presentation	General culture
Psychological and emotional intelligence	Understanding of the job	Problem solving
Punctuality	Personal presentation	Social interaction
Attention and concentration	Comprehension	Written communication
Decision making	Motivation	
Availability	Organisational capacity	Dynamism and proactivity
Interpersonal relationship capacity	Life experience	IT skills
Family history	Education	Professional experience
Professional aptitude	Presentation	Voice

Tests are used to evaluate academic and professional knowledge, emotional and psychological intelligence, leadership qualifications, management skills, motivation for work, general intelligence.

Austria

Regarding the evaluation process the following answers were collected:

Use of tests:

In one organisation the candidates are evaluated regarding the previously mentioned qualifications with the methodology of a personalised online test based on the Model of





Graves¹ and cognitive performance test additionally to a job interview. The most common standardised test is the cognitive performance test WIT2;

In the other organisation tests like intelligence tests are used to evaluate academic and professional competences, emotional intelligence, psychological tests and others for leading positions. Apart from the tests mostly use job interviews are used.

Tests evaluate leadership qualifications, management skills, motivation for work. They use standardised tests like MAP, IEA, FÜMO, ISK

Use of interviews:

In one organisation questions are asked to the candidates about competences which they think are essential for the job they are applying for. Candidates are asked to state the competences they think to be important and to underline this by a practical example.

A standardised questionnaire is in use for the interviews. Questions depend on the requested competences for the job profile or may be along the application documents.

The evaluation will be done through a template (an evaluation grid) by the interview team, possible answers will be evaluated with points, those will have different impact due to the following areas: 1/3 professional competences, 2/3 personal competences.

Examples of interview questions: "Tell us about a professional event, which did not turn out well. How did you react and what was the result?"

This is a question to evaluate problem-solving skills with possible answers:

- The person is motivated and willing to solve problems or to avoid them;
- The person reacts flexibly to unexpected barriers and problems;
- The person perceives things positive and as a challenge.

In the other organisation for the interviews a standardised questionnaire is not followed.

Examples of interview questions there are:

- What is your motivation to apply for this job?
- What can you tell us about prior job experiences... what were challenges and what did you like to do?
- If the candidate changed their job often, why did they do so?

¹ Köbler R. (2009) Neue Wege im Recruiting: Mehr Effektivität mit Gravesmodell und Metaprogrammen. Ein praxisorientiertes Handbuch Taschenbuch





- Checking if the candidate has the competences required in the job description
- Organisational skills
- Leadership style
- What was the biggest challenge you faced dealing with other people?
- What do you require (framework, social conditions) to be able to do a good job?

Criteria for the selection of candidates after evaluation of the tests:

If both tests and interviews are used which importance do you give to which tool?

In one organisation the test is a prerequisite to determine whether an interview will be conducted (the results in the cognitive area have to be at least average).

In the other organisation the importance of the interview is 70% while the test makes up 30%.

In the other organisation selection criteria are the following: Does the candidate already have a similar experience, in a similar context. If no, does the candidate convince nevertheless (due to other qualifications and skills?).

Bulgaria

In Bulgaria all local PA bodies (Labour Offices) are managed by the Ministry of Labour and Social Services. All PAs follow strict procedures, so they did not provide answers to our interviewers but redirected us to the Ministry body. Following an official letter request, an official answer was given describing the standard procedure all PAs use.

The procedure includes predefined steps: candidates' CV collection, followed by interviews with selected candidates that match the criteria. Initial evaluation, based on CV that is conducted, evaluates academic and professional knowledge as well as the candidate's experience. The interview that follows, aims to re-confirm the professional capabilities of the candidates, as well as to evaluate the candidate's soft skills as communication, presentation, etc. No tests or role plays are used in this process.

Italy

The methods and criteria that the PA uses to evaluate candidates' capabilities are mostly interviews and intelligence tests about academic and professional knowledge, emotional and psychological intelligence.

The reason why they use tests is to confront applicants with statistical and measurable data: in this way, they can understand if the candidate is in the average range or if he or





she is below or above it. Standardised tests are used such as personality tests like MMPI, Rorschach and intelligence tests such as Wais.

When doing interviews the PA usually follows a standard procedure. Questions asked while interviewing are technical, and most of the times related to problem solving in order to understand decision making and relational skills.

Candidates are evaluated on the basis of their answers, taking in account the flexibility/rigidity, life experience skills and emotional competences.

The importance given to the tests results is 50%, which is assessed together with other contents that emerge during the interview.

Portugal

In what concerns the selection processes in the three entities, the following results were obtained:

- 2 entities use tests and interviews to evaluate its candidates;

In the case of one of the local municipalities (of a medium-sized town), the process starts online with the sending of resume and Education certificates, then candidates who pass the first filter have to complete a professional knowledge test (legislation, accountancy, financing, etc.), then they pass to the psycho-technical process (intelligence tests bought to a certified external company and interview with 3 psychologists). The process ends with an interview with a jury composed by at minimum 3 members of the RH service. In certain cases, a role play is implemented, depending on the functions to be developed. Every step of the process is eliminatory. The whole process obeys to written and strict procedures: clear questions asked to the candidates and evaluation frame of reference.

Examples of questions to the candidates during the interviews with HR:

- Which technical knowledge and experience do you have in the area, which allows you to solve the more complex questions?
- 5 words to describe yourself
- How do you react to a conflict between your colleagues in your service?
- How do you react when your superior criticizes your work?
- How do you face difficult situations, pressure?
- How do you evaluate the importance of team work?
- How do you keep motivated, and motivate your team at work?

Table 9 | Criteria for the evaluation frame of reference (every criteria is scored from 1 to 3)





Interest for the function	Self-control	Self-esteem, influence
Self-control	Self-care	Reasoning capacity
Mode of expression	Presentation	General culture
	Understanding of the job	

The Employment and Professional Formation Institute of a medium-sized county uses group and individual semi-structured interviews for their selection processes, as well as professional knowledge tests (legislation, accountancy, fiscality, etc.). The entity has written procedures for its recruitments and uses a "diagnostic fiche" as a guide for their processes.

Table 10 | For the group interviews, their criteria for evaluation focuses on

Punctuality		Personal presentation	Social interaction
Attention concentration	and	Comprehension	Written communication
		Motivation	

Table 11 | For individual interviews, their criteria for evaluation focuses on

Availability	Organisational capacity	Dynamism and proactivity
Interpersonal relationship	Self-care and presentation	IT and language abilities
capacity		

1 entity uses only interviews.

The Employment and Professional Formation Institute of a small county uses individual semi-structured interviews for their selection processes. It is worth mentioning that the entity has implemented tests during years (Vienna tests: general intelligence, aptitude and performance, personality, motivation and interests), but they stopped using these tools because their content didn't match the relevant criteria the entity wanted to evaluate. The tests were implemented by professional counsellors. The entity has written procedures for its recruitments.

Table 12 | On what topics do questions to the candidates focus

Family history	Education	Professional experience
Medical history	Laser	

Table 13 | Criteria for the evaluation frame of reference





Professional aptitude	Presentation	Voice
Language	Vocabulary	

The four interviewees from the PAs (2 for the Municipality) state that interviews have more weight than tests in their evaluation.

All interviewes agree that interviews are the most valuable tool for their recruitment processes, more than tests of any kind. By meeting face-to-face, they are able to get to know the candidates much better than with tests. They wouldn't recruit their candidates without interviews. In the case of the Municipality, they even added an interview to their psycho-technical step, in addition to the tests.

The three entities agree that only tests are not sufficient.

<u>Spain</u>

It should be noted that in Spain, Public Administration vacancies are covered through public examinations that include tests, oral or written exams and practical cases.

Therefore, the answers provided by Public Administrations in this report are referred only to their work as intermediaries between companies and job candidates.

Of the 4 PAs interviewed, 1 does not respond to the question and 3 of them use the following tests:

- Semi-structured psychological tests to assess interest in participation, priorities and availability.
- In-house tests for a technical project, open question examinations or multiple-choice examination.
- In-house questionnaires whose indicators aid in the assessment of cross skills.

Concerning interviews as an assessment and selection method, 100% of the PAs use them for selecting candidates. 2 use standardised procedures and 2 do not. The most significant questions are:

- Why do you want to participate in the project?
- What do you think you can contribute?
- Could you start right away?
- Are there any short-term or long-term obstacles?
- Ability to adapt.
- Leisure and free time activities.
- Have you sought employment in the last month?
- What special skills do you have that could be useful in your future profession?





- What do those around you think about your participation in the programme?
- What might be the positive and negative aspects of this experience?
- What tasks do you like most? Is there anything that you especially dislike?
- What do you think about team work?
- Why have you come to this interview? (Essential motivation)
- Do you feel able and motivated to achieve the objectives of this programme?
- What might be the positive and negative aspects of this programme/process?

One of the PAs explains that the questions are open so as to explain the relationship between experience and the position as well as the tasks and functions yet to be done. 3 of the 4 PAs answer the question about how candidates are assessed according to their responses and how it is evaluated if it is the right candidate for the position.

One PA suggests that a candidate is right if:

- He or she has the appropriate training.
- Has a pro-active attitude.
- Wants to participate in the process (e.g. in a three-year training and employment process that involves moving abroad).
- · Is highly motivated.

After analysing all of these variables, job suitability is determined, using the following Liker scale: Degree of position suitability (mark accordingly) Maximum High Medium Low Minimum.

One of the PA bodies says that the essential issue to bear in mind is direct responses regarding immediate availability and reason for making a particular choice. The evaluation is qualitative.

Lastly, another of the PAs asserts evaluation in terms of work experience, know-how and methodology to be applied in expected duties. Among examples of interview questions used, the PA employs the following:

- Do you know what the position consists of and the professional expectations of this occupation? (In regards to the tasks and duties)
- What is the opinion of those around you in terms of your decision to take part in the programme?
- What tasks do you like most? Is there any particular duty that you especially dislike?

Other selection methods, besides tests and interviews are simulations and role plays. 2 of the 4 PAs respond to this question. One of them explains that they carry out a simulation interview with role plays of which there are three participants: • Interviewer • Interviewee • Observer. The professional prompts, corrects and highlights the positive.



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The participants, under the guidance of the facilitator, identify communication styles, greetings, body language, etc. Another PA explains the use of other methods e.g. they ask questions during the interview in which they explore possible situations that might arise on the job, in training or in the service. The candidate is asked to imagine how they would manage the situations.

Selection criteria, all 4 PAs respond. For one of them, the criterion is the interview. Two of them use the criteria of tests and interviews, on a 60-40 weighting in one case and a 30-70 (firstly a pre-selection interview is held and the tests are carried out by the shortlisted group).

3. What needs do PAs have in this area, which are not met?

Summary

For PA problems regarding the tests are the high prices, the unanalysable data and the unsuitability of tests to the specific positions the candidates are applying for. Another problem is the ease of manipulation of the test results, mentioned in one of the partner countries.

Austria

Testings are often transparent so participants might give desirable answers in order to get the job. This makes the available testings not much reliable as per PA interviewees' opinion.

Bulgaria

There is no specific need or prescription mentioned in Bulgaria. However if an affordable and easy to use testing battery option is available, there is a room for future use.

<u>Italy</u>

The most common problem is the nervousness and agitation that the person who's being interviewed experiences. It was highlighted that in this target group, given the fact that dependants are usually hired with a fix term contract, it would be useful to assess personnel periodically for the purpose of a correct service performance and delivery.

information contained therein.

Portugal





In what concerns the self-assessment of the selection processes in the three entities, we obtain the following results:

- The three entities declare that the selection process of their administration is not fully satisfactory, and should be improved.
- The focus point of the negative self-assessment of the selection processes in the Municipality is mostly related to their bureaucracy and slowness. They declare: "The administrative process within the Public Administration is very bureaucratic, slow and should be improved at various levels. Costs are very high for these recruitment processes; they last too long (8 months) and thus are not efficient and cost-effective. We lose a lot of good candidates who started the process but then are hired in the private sector because they can't wait 8 months to get employed".

Specifically in terms of testings:

The Municipality declares: "We used INA tests but we were not satisfied with the results: the questions didn't match what we were looking for to evaluate. Plus, they were expensive: 120 Euros per test. We now have a new process for psycho-technical evaluation: we combine a test (from another company) with an interview".

As mentioned before, the Public Employment Centre states: "The Employment Service stopped using aptitude and performance tests because they weren't adequate to the public. The tests didn't match the needs of the Service".

Spain

When it comes to assessment and selection needs that are not currently met all of the PAs answered, with two indicating no needs while the other two expressed needs:

- Training needs and better know-how regarding selection tests.
- Lack of reliable analysis tools, evaluation and management of personal and professional skills, et al.

Concerning most common problems in the evaluation and selection process, 3 organisations of this Target Group affirm the following:

- Shortage of valid and reliable complementary tools to carry out more accurate evaluation and selection processes and which can cover the different dimensions of work, training or service.
- Lack of time and candidates for certain training activities.
- Large number of people applying for the selection process.

Concerning specific areas of evaluation that should be improved, 2 of the organisations point out the following:





- Evaluation for programme changes, given that unemployed people do not always really commit themselves because of lack of motivation or because programmes do not fit into their lives.
- Analysis, evaluation and management of personal & professional skills.
- Management and development of talent and creativity.
 - 4. Gender specifics.

Summary

According to the interviewed PAs there are no differences between the performance of men and women throughout the evaluation process. Only one organisation observes differences in personality testing but not in performance testing. One organisation states that women communicate better and are more expansive, when men present better results in abstract and mechanical reasoning in tests. Two of the partner countries attribute the differences to the structure of the labour market, rather than to the evaluation processes themselves.

Bulgaria

There is no gender specifics discovered. There is a great shortage in employment services, so the Labour office collects all candidate CVs and requests, no matter of the gender. Candidates are evaluated based on provided information not on tests.

Italy

No difference has been found with regards to gender while interviewing Public Administration.

Austria

In what concerns the gender specifics observed in the two entities, the following results were obtained: One organisation does not perceive any differences. The other organisation observes differences in personality testing but not in performance testing. Any way they do not place high importance on that.

Portugal

In what concerns the gender specifics observed in the three entities, the following results were obtained:

> The three entities agree that they don't notice any significant difference between women and men when applying tests;





- The three entities agree that some differences exist, and are notable at two levels:
 - The composition of the labour market: some job categories are more feminine and others are more masculine. Though, these gaps tend to decrease in the last years;

The Municipality declares: "We don't notice any specific difference in this regard. At the Municipality level, we have a "neutral" approach regarding gender: we have procedures against harassment and a code of conduct, but we don't apply positive discrimination on women. Our focus is the matchmaking between the candidates and the jobs, independently from their gender. The differences we find are in the labour market composition: some jobs are more occupied by women and others by men. But this tends to change over the years, and these gaps are lower now".

The Employment and Professional Formation Institute states: "We don't notice any specific differences in this regard. The differences we find are in the labour market composition: some jobs are more occupied by women (geriatric, education, secretary), and others by men (electricity, gardening, cemeteries, drivers). But this tends to change over the years, and these gaps are lower now."

 Women and men have different kind of qualities that can be attributed to gender.

The Municipality states: "In general, we observe that women, who work well, work better than men, they are better at communicating and they work harder. Men are more focused on their tasks and don't look much around".

The Employment and Professional Formation Institute declares: "In general, we observe that women communicate better and are more expansive, when men present better results in abstract and mechanical reasoning in tests".

Spain

Of the 4 organisations interviewed, 100% assert that there is no difference in performance between men and women. One of the organisations explains that although there are no differences in performance between men and women, more men participate in the selection process, especially in traditionally male occupations e.g. plumbers, mechanics, electricians, etc.

III. Post-Secondary and Professional Education (PSPE)

Table 14 | Number of interviewed PSPEs / representatives of PSPEs





Country		Number of PSPEs interviewed	
1	Austria	2	
2	Bulgaria	2	
3	Italy	3	
4	Portugal	3	
5	Spain	6	

1. What do PSPEs evaluate?

Summary

The PSPEs surveyed respond that they mainly evaluate skills: professional, academic & personal. Furthermore, most of them highlight the following:

- Mathematical and verbal intelligence
- Concentration
- Personality
- Memory
- · Emotional & social intelligence

Other skills they assess:

- Behaviour: specific to situations and work
- Adaptation of principles and personal values to those of the company.
- Adaptation of personal circumstances to challenges and personal circumstances involved in accepting the position (commuting, travelling, timetable, etc.).
- Adaptation of objectives and anxieties to the possibilities offered by the position, stress management, organisational skills.

The emphasis by this target group is on academic competencies.

<u>Austria</u>

In what concerns the fields evaluated by the entities interviewed, the following results are obtained:

- Specific knowledge: knowledge, skills, attitudes
- Professional competences regarding a specific profession/employment
- Academic competences area of studies
- Personal competences (soft skills) especially communication skills, teamwork, stress management, planning skills, etc.
- General intelligence (cognitive skills): the mental behaviour of a person or personal competences





- Verbal expression only for trainers teaching languages
- Concentration
- Emotional, social competence
- Patterns of behaviour and experiences related to work

Bulgaria

Regarding the Post-Secondary Professional Education (PSPE) target group in Bulgaria, 2 entities are interviewed: one in the capital city and the second in the second biggest city in the country. In what concerns the fields evaluated by the two educational institutions, the following results were obtained:

- Competencies, at academic level, are evaluated by all.
- In a few particular cases only, professional and personal competencies are evaluated by the career centre.
- Intelligence, personality and social and emotional intelligence are partially evaluated using tests by the career centre professionals.

Italy

With regards to what experts evaluate in Post-Secondary Professional Education, there are common competences the overall target group considers, such as professional and personal competences. With regards to personal, more specifically, communicative competences, *teamwork*, *stress management* and *organisational management skills* are the skills that professionals look for when hiring a new member.

In relation to cognitive capabilities, two out of the three experts interviewed, consider *mathematical capabilities* to be crucial, two out of three consider also *expression* capabilities to be crucial, and two out of three consider concentration capabilities to be important when selecting someone for a position in PSPE.

The three experts interviewed state that *personality* is key point of evaluation during the selection process. *Organisational and communicational capabilities* are also other important aspects when hiring personnel.

Portugal

In what concerns the fields evaluated by the three entities interviewed, the following results were obtained:

Competencies, at academic level, are evaluated by all.





- In a few particular cases only, professional and personal competencies are evaluated by one entity.
- Intelligence, Personality and Social and emotional intelligence are not evaluated by any of the interviewed.
- No additional field is evaluated.

Spain

Of the 6 PSPEs surveyed, 5 respond that they mainly evaluate skills: professional, academic & personal. Furthermore, most highlight the following:

- Mathematical, verbal, emotional and social intelligence
- Concentration
- Personality
- Memory
- Emotional & social intelligence

Other skills they assess are:

- Behaviour: specific to situations and work
- Adaptation of principles and personal values to those of the company
- Adaptation of personal circumstances to challenges and personal circumstances involved in accepting the position (commuting, travelling, timetable, etc.)
- Adaptation of objectives and anxieties to the possibilities offered by the position

2. How do PSPEs evaluate it and select candidates?

<u>Summary</u>

All institutions use academic criteria. Documents and previous experience (diplomas, certificates, titles, publications and attendance on conferences, etc.) are evaluated, to a different extent. Some PSPEs only look for an adequate diploma to be present, some evaluate qualitatively some or all of the other factors mentioned. Tests and interviews are conducted as a method of evaluation. Often the tests work as filters which determine whether the candidate is worth holding an interview with. The procedures vary in the different countries and PSPEs: there are both standardised and not standardised procedures. Tests, when present, are more often standardised, whereas interviews more often aren't. Practical tests, such as music and sports tests, as stated by Portugal,





are more often in-house. The method of "group tests" is only mentioned by Spain. The different methods evaluate relatively the same qualities of the candidates; however it varies from country to country which specific competencies are evaluated by tests and which by interviews. For example language competencies in the interviewed PSPEs in Portugal are evaluated through interviews and in Austria – through tests. Other factors that are commonly taken into account are professional/academic background, scientific knowledge, scientific quality and validation, contemporary knowledge and research ability, life situation, self-description, cultural, intellectual and academic background, motivations, mathematical competencies, basic education level, organisation values and identification, intelligence, personality and social and emotional intelligence and generally qualities needed to fit the specific course/position.

Examples of interview questions, evaluating both professional, but more importantly academic competencies, and personal skills:

- Detailed questions to professional experiences or prior employers
- Strengths and weaknesses
- What would prior employers tell us about you?
- How do you make decisions?
- Team-player or individual worker
- What do you consider important for working with your colleagues?
- Leadership experiences
- Opportunities for development where do you want to be in 5 years
- Special questions related to the job the candidate is applying for

Austria

Regarding the evaluation process the following answers are collected:

Use of tests:

Tests are only in use at special occasions like for selection for apprenticeships (in Austria there is a system of dual education – based on school and practice in an enterprise lasting for three years). Apart from that case interviews are the most common tool in use. Tests are common to evaluate German language and mathematical competences and the basic education level of candidates. For these evaluation tests in use are standardised tests from the Chamber of commerce. They have no selfdeveloped tests.

Use of interviews:





For interviews there are no standardised guidelines. Questions are depending on the competences requested for the job they are seeking candidates for.

Examples of interview questions:

- Detailed questions to professional experiences or prior employers
- Strengths and weaknesses
- What would prior employers tell us about you?
- How do you make decisions?
- Team player or individual worker?
- What do you consider important for working with your colleagues?
- Leadership experiences
- Opportunities for development where do you want to be in 5 years?
- Special questions related to the job the candidate is applying for

Criteria for the selection of candidates after evaluation of the tests:

If both tests and interviews are used what importance do you give to which tool?

The most important criteria is the comparison of the profiles of the candidates regarding qualification (education and experience), leadership experience, social competences, does the candidate fit in our organisation / the department, expectations of salary, possible starting date.

There are no other methods in use.

In the tests for apprenticeships the candidates have to reach a certain number of points to be invited for an interview.

Bulgaria

Generally both institutions use academic criteria to evaluate its candidates. Both entities have standard procedures for its selection and consultation processes.

- Only 1 entity uses tests and interviews (only in specific cases) to evaluate its candidates. Both use tests.
- Intelligence, personality and social and emotional intelligence are partially evaluated via tests done by the career centre professionals.

information contained therein.

Italy





The method that the three experts use in evaluating the candidates is interview. None of them have standard procedures and the three of them differ in the type of questions they ask. Hereunder detailed the type of questions asked:

Table 15 | Detailed information from researched PSPEs in Italy

	/		
PSPE 1	The type of knowledge wanted to know here is the scientific knowledge, scientific quality and validation, contemporary knowledge and research as well as how to describe issues and methods of how to carry out a		
	research.		
PSPE 2	- Which work do you do?		
	- What is your professional/academic background?		
PSPE 3	Type of questions:		
	- A first question always aims to obtain a self-description of the own cultural, intellectual and academic background.		
	- A second question is related to the motivations that a person takes into consideration to apply for an available position.		
	- A third question is meant to inquire more about academic-disciplinary profile.		

As for legal regulations (legal limitations) as to who has the right to apply performance testing in Italy in the PSPE sector, the norms are very soft, and interviews are the common way for recruitment process.

Usually, the selection process is as follows:

Firstly, and foremost, titles/diplomas obtained are assessed. The first step is the assessment of bachelor / master degree, PhD and the quality of them; when they check these titles, they look at the quality of the thesis, the quality of publications, if these publications have been at national or international level etc. The participation at national/international congresses is also assessed. Once the candidate passes this first phase, an oral interview takes place, in which discussion of the thesis, PhD, publications etc. is taken into consideration. Once this is done, resolution methodologies in the research field are also discussed.

Portugal

In what concerns the selection processes in the three entities, were obtained the following results:

 1 entity only bases its decision to accept candidates on academic criteria (adequate diploma to integrate the course). Every candidate who completes this requirement is accepted in the course, upon payment.





1 entity uses academic criteria and interview to select its candidates. It starts its selection process with a verification of academic competencies (adequate diploma to integrate the course) of the candidates. The second step is an individual interview, to evaluate the English level (not a test, but a self-evaluation made the candidates themselves) and the motivation. This last criterion is evaluated through a questionnaire, which serves to "make sure that the candidates understand the course, its content, and are committed to integrate into the formation".

The entity has standard (but not written) procedures for its selection processes.

Table 16 | The criteria for evaluation

Table 10 The change of evaluation				
English level	Experience in the area of	Personal situation (family,		
	the course	local of residency, stability)		
1	1	1		

1 entity uses tests and interviews (only in specific cases) to evaluate its candidates: The university, as public entity, obeys the national law regarding the selection process for Professional Education. In Portugal, the access to PSPE in the public system is regulated by National law and consists in tests (made at national level in their majority) to evaluate the academic competencies of the candidates. This first step is, in any case, eliminatory. In some specific cases, practical tests (sport and music) are implemented, and tests are made at local level. When the participants are above 23 years old, the selection process is more complex and passes through more steps: a CV analysis for the evaluation of professional competencies, and an individual interview.

Table 17 | Points for discussion during interviews

Motivation	Professional experience	Qualities to integrate the	
		course	

In the case of PSPE, and in particular for public entities, the most relevant criteria to select the candidates are the diploma and the academic competencies, which have to be in harmony with the course they intend to attend.

It is though noteworthy that, whenever flexibility exists, the recruiters like to meet the candidates face-to-face, even if the interview is not the most important dimension.

<u>Spain</u>





Of the PSPEs surveyed, 5 of them use different types of tests, 2 are standardised whereas 3 are not standardised or in-house. Among the in-house tests the following can be highlighted in order to:

- Select students for courses
- Measure minimum knowledge requirements for specific courses
- Determine if requirements are fulfilled, if there is culture fit in the company and if the work can be carried out satisfactorily
- Provide tests that produce objective results, without being open to interpretation or discrimination. These are in-house or specific to each course.
- Provide tests of knowledge and attitudes, which are usually practical cases from the training company's in-house materials.
- Standardised tests are used to measure skills, personality or intelligence e.g. MBTI, COMPETEA, 16PF, CHARTS, MATRICES, FACTOR G.

Regarding interviews as a method of candidate evaluation and selection, 5 of the PSPEs use interviews to the aforementioned purpose. 3 are standardised and 3 in-house or non-standard, bespoke to specific types of selection. When it comes to the questions asked, information is only obtained from two of the organisations and they are related to:

- 1. Organisation values and identification.
- 2. Information checking regarding:
 - Details of previous experience (situations, duties, time management, personal routines, and performance indicators, contribution to numerical and economic results).
 - Training and academic requirements.
 - Foreign language fluency (if necessary).
 - Discuss one or various critical incidents associated with key competences.
 - Put forward a normal case scenario related to a key competence.
 - Self-evaluation and motivation questions for the position.

Examples of the main questions used in the interviews (5 of the 6 PSPEs responded):

- Do you have work experience in the tourism industry?
- What are your expectations in the tourism industry?
- Do you prefer to work alone or in a team?
- Why do you want to do the course?
- What are your professional expectations?
- What university degree did you do?
- What training have you done?





- What experience do you have in similar positions?
- Do you see yourself able to carry out the tasks previously set out?
- What are your strengths?
- Do you have any questions? Other examples of questions related to selfevaluation and motivations:
- In what way would we and/or our products stand out?
- Why are you interested in working here?
- What do people think of you?
- What do those close to you usually tell you?
- When you were criticized or reproached, what was said?
- What are your major achievements?
- Failures? What did you learn from them?
- How do you see yourself or what would you like to be like in 3 years' time?
- What do you think you might achieve with us?
- What could we help you to achieve?
- What would you do with a million Euros?
- How would you use your time if you only had 6 months left to live?
- What do you usually enjoy most?
- In what activities have you achieved the most in your life?
- In what activities/circumstances did you get worst results?
- Why do you want to change companies?
- What difficulties do you think you will have to face in this position?
- How do you think you will approach them?
- What do you imagine your day to day activities will be like?
- What do you expect from your boss?
- What do you think your boss expects from you? What about your colleagues or subordinates?

With regard to the assessment of candidates and how to ascertain whether a person is suitable for the required level, 4 of the PSPEs respond as follows:

- When the interview shows motivation and a liking for teamwork. The objective is to train future professionals.
- When a panel of experts (managers, direct superiors or persons in a similar position) ask the same question: an ideal response is created based on what is answered.
- Sometimes a projection or supposition is made of how an ideal candidate should respond in terms of company values.





- Evaluation is then quite intuitive and based on a scale of 1 to 5. A sum is taken and then a suitability quotient is calculated.
- At the teaching staff's discretion.
- According to both verbal and non-verbal answers, and the needs of the position.

Other methods of selection in addition to tests and interviews: Only one organisation says that they use simulations or role plays. Furthermore this organisation uses other methods such as 'group tests', in which the idea is to assess: • Social skills • Positive attitudes. The standard procedure consists of: pre-defined case according to the number of people (5 minutes per person and a maximum of 7 people). The assessors have a checklist of skills and behaviour. There is also a field for making relevant notes.

Selection criteria: of the 5 organisations interviewed, 2 set the weight of test to interview at 50-50%; another 40-60% and 2 give prime importance to the interview. The 50-50% organisations explain the following:

- They use a knowledge test where the level of questions varies according to the course access requirements. Some for people with no formal education, some for those with a compulsory secondary school certificate (ESO) (to 16 years) or those with a higher secondary certificate (A levels).
- A personal interview which is only arranged after the tests have been marked. A trainer will be present as well as a technician from the training department. The organisation that gives full weight to the interview explains that tests are only given for operational positions or large numbers of candidates. It acts as a filter. Thereafter the decision is based on the interview.

Other selection criteria (3 PSPEs responded):

- 1. Letters provided by the Employment and Training Service to interested candidates. These letters are aimed at determining priority in the training activities. Priority is also given to those unemployed people who can prove that they have been victims of gender-based violence, have a recognized level of disability over 33%, who are older than 55 years, etc.
- 2. Group dynamics: if a candidate does not show a good disposition and not make progress, then he/she should:
 - Contribute ideas in public
 - Defend and argue them
 - Listen to others
 - Give positive feedback
 - Allow others to express themselves





- Show assertiveness
- Manage time well
- Find a role in the team
- Contribute to a good atmosphere and be polite.
- 3. Candidate behaviour during the process:
 - Punctuality, reliability, balance, ease
 - Writing and content of letter of introduction
 - Proven experience
 - Recommendations.
 - 3. What needs do PSPEs have in this area, which are not met?

Summary

The majority of the PSPEs interviewed do not identify specific needs regarding testing that they have, which are not met. However, one PSPE states that tests evaluating personality are needed, rather than intelligence tests. The interviews conducted with Spanish PSPEs show, that the specific requirements for the qualifications of the people carrying out the test could be a problem, however the high costs are generally a bigger issue.

Austria

There aren't any specific unmet needs, mentioned by the PSPE interviewees.

Bulgaria

Both interviewees do not provide any specific answer to this question.

Italy

Regarding common problems that can be encountered in the process of evaluation, the interviewee highlights the "inexperience" of the people who participate into the selection process, who express their being uncomfortable. The low level of specific professional competences is another of the problems found.

Portugal

1 entity declares not being satisfied by its selection process.





The focus point of the negative self-assessment of another one is about the simplicity of the process.

The interviewee states: "I would like to complete the selection process with exercises, and tests to evaluate the personality and behaviour of the candidates (social interaction, reaction in case of conflict). I am not interested in intelligence tests, they are irrelevant for me. I would also like to implement role plays, and not be the only one to evaluate the candidates".

2 entities declare being satisfied by their selection processes; one of them declares: "The process in my entity is satisfactory: candidates are already professionals who work in a specific area and want to specialize. We assume that their will to enter such kind of course demonstrates their motivation and it is a sufficient criterion".

However, speaking more generally about the health sector, this interviewee thinks that, in addition to the national knowledge tests to enter the university, it would be important to implement psychological evaluation and occupational orientation, because the health specialists need to have specific skills that a simple academic knowledge test can't evaluate.

The other interviewees have no specific comment regarding this question.

Spain

In relation to whether there are any needs in the field of evaluation and selection that are not currently met, all of the PSPE respond, 3 of them say that there are some needs, 1 declares that there are needs but does not specify what they are, and the other 2 point the following:

- 1. The tests would have to be regulated by law and reports signed by psychologists with collegial seal, as is the case with the engineering projects for engineers or legal procedures for lawyers and attorneys. Whoever provides and makes the reports should be a psychologist with accreditation in Work Psychology, EuroPsy. The expert should apply the standards of ISO for the assessment and management of people. The evidence and methodologies would have to be certified.
- 2. The standardised tests that are typically applied are expensive and can only be carried out by psychologists. The implementation of the tests would not be problematic since the majority of selection technicians tend to be psychologists. The higher cost involved is due to the price of the product.





In relation to the most common problems arising in the process of evaluation and selection, 3 organisations of this Target Group respond as follows:

- In some training activities there are many inscriptions (sometimes more than 200) and this makes the process of selection, for example of 15 people, never ending.
- Unification of levels for the beginning of the courses.
- Be objective without falling into the subjective tendency of the first impression.

In relation to whether there is a specific field of assessment in need of improvement, 2 of the organisations believe that there is no need and 2 organisations said the following:

- The admission process, since the law establishes that a certain number of candidates to be admitted to the training action. This leads to problems of lack of motivation, dropping out, wasted places, etc.
- The training of small entities in personnel selection, because they do not have human resources departments.

4. Gender specifics.

Summary

There is little and contradictory information about the differences in performance of men and women in tests and interviews. The majority of the PSPEs interviewed either don't answer the question or say they don't notice any differences. Individual statements worth noting are:

- Women are less creative compared to men as per their test results. (Bulgaria)
- In the tests for apprenticeship mostly the girls in German and mathematic gain more points than the boys. (Austria)
- For Sports Education in particular, it is noteworthy that different practical tests are implemented for men and women (physical tests are adapted to gender, in particular in what concerns the "physical force"). (Portugal)
- Women show greater interest and consistency in what they choose. Women usually obtain better scores on the tests of intelligence, and also in group tests. (Spain).

Austria

In what concerns the gender specifics observed in the entity, the following results were obtained:





In the tests for apprenticeship the girls gain more points than the boys in German language and mathematic tests. But the training centre does not consider this as relevant because there are more criteria in use for selection.

Bulgaria

There aren't any gender specifics mentioned in both interviews. However one of the respondents shares her personal observation that women are less creative than men as per their test results.

<u>Italy</u>

No difference is founded with regards to gender while interviewing for Post-Secondary Professional Education.

Portugal

The three entities agree that they don't notice any significant difference between women and men when applying tests. Though, for Sports Education in particular, it is noteworthy that different practical tests are implemented for men and women (physical tests are adapted to gender, in particular in what concerns the "force").

Spain

Of the 6 PSPE questioned, two do not provide specific information about gender specifics, two say that there is no difference in performance between men and women, one of them emphasizes that 90% of the candidates are women, as the Sector of Services, is a field more attractive to women. The other two say that there are differences in the performance between men and women emphasizing on the following:

- Women show greater interest and constancy in what they choose.
- Women usually obtain better scores on the test, tests of intelligence, and also in group tests.

One of the explanations for the insufficient interview results is the cognitive distortions of the interviewer, not always associated with gender.



Part B - Legal Regulations

Overview of the regulatory situation in the partner countries, current and expected in the near future

I. Summary

In the partner countries there exists some regulation in the field of testing. In most of the countries **intelligence and personality test** may only be applied or at least interpreted by accredited psychologists (Bulgaria, Italy, Portugal and Spain). In Austria only tests for psychological diagnostics have to be carried out by qualified staff (clinical psychologists).

On International level there is the International Test Commission (ITC) which communicated the following best practice Guidelines:

- 1. ITC Guidelines on Adapting Tests
- 2. ITC Guidelines on Test Use
- 3. ITC Guidelines on Computer-Based and Internet-delivered Testing
- 4. ITC Guidelines on Quality Control in Scoring, Test Analysis and Reporting of Test Scores
- 5. ITC Guidelines on the Security of Tests, Examinations, and Other Assessments The guidelines may be downloaded in English and various other languages from the ITC website.

II. National Information

Austria

Quality Monitoring in psychological diagnostic:

Whilst simple testing does not need special qualifications, testing in psychological diagnostic have to be carried out by qualified staff (clinical psychologists). Estimations by professional associations in the German-speaking countries are that only 20% of all testings are done by qualified staff and tools.

The quality of the testing is not always visible for users, because at the end only the results are communicated and not the methodology.





For test security, test publishers sell the tests only to people who have proven their educational and professional qualifications to the test publisher's satisfaction. The result is that not everybody can buy standardised tests.

Quality Monitoring has three important aspects:

- Quality of the implemented method, quality criteria of psychological diagnostic methodologies;
- Qualification of the involved staff:
- Following of procedures and rules (data protection, personal integrity, kind of communication of results);

Psychological Testing in Austria

In Austria psychological testing is regulated by Ö-NORM D4000 for requirements for processes and methods in recruiting and staff development. In this regulation quality criteria and standards for professional qualification testing, interventions and evaluations during staff selection processes are defined. Those requirements are valid in general and may also be used for Interventions and evaluations.

Regarding Analysis and aptitude assessment regulations of DIN33430 and the related requirements, which are described in the annexes of Ö-NORM D4000 are valid.

Special aspects of quality criteria:

- Transfer of tests to other languages: it is not enough to translate the test; it also needs to be controlled if the same things will be measured by the test. In many cases the norming of the test has to be redone after translation.
- Guidelines for computer and online testing;
- Opportunities and limitations.

<u>Bulgaria</u>

In Bulgaria, only psychologists, enrolled in the Psychologists Association, can apply and interpret intelligence and personality tests. The psychologists also have to be accredited for the specific tests they apply. On the other hand, the tests must be either created in Bulgaria or standardised for Bulgaria and must be accredited and listed in the Register for accredited psychological tests, administered by the same organisation.

Currently in Bulgaria there are only 32 tests standardised for application. These tests are as first option translated and adapted for Bulgaria by a company that has the rights to apply them, or as send option, they are developed by the Bulgarian Academy of Science or another Bulgarian entity or person, that has the rights to the test.





All of the above makes it difficult and expensive for SMEs to apply standardised tests.

On the other hand companies often develop their own testing methods. They test applicants for competences, not so much for intelligence or personality traits. For example companies test for the ability to solve simple mathematical problems, to translate a text in another language and other competences, related to the position for which the candidates apply.

Italy

Italian legislation intervenes both in regulating the use of tests— namely psychological aptitude tests in order to protect the employee's or potential employee's privacy — and in protecting women both during the recruitment and selection process and while they are employed.

Selection of personnel through tests: legal framework and controversy for their administration.

In the case of public administration, the tests used for the selection of personnel (generally based on knowledge, logical and mathematical skills, and psychological attitude) are administered in the context of highly competitive public open examinations organized by local, regional and/or national government, depending on the scale of the bid and the type of positions at stake.

On the other hand, when private employers resort to tests (the preferred method of selection, especially in the case of SMEs, is usually oral interviews) they often make use of psychological aptitude tests, but these carry a number of controversial elements, both on an ethical and legal level.

Aptitude tests: who can administer them?

The administration of psychological aptitude tests in Italy is indirectly regulated by the ANPAL (National Agency for Active Labour Policies), a government body instituted with a 2015 legislative decree (Decreto legislativo 14 settembre 2015, n. 150, di attuazione del c.d. Jobs Act, Legge 10 dicembre 2014, n.183) ². In fact, aptitude tests can be administered exclusively by chartered psychologists and these are often employed by human resources (recruitment and selection of personnel) agencies. Private companies – and in particular SMEs which in most cases don't dispose of their own HR department – often outsource the selection of their personnel, and other employment-related

²Agenzia Nazionale Politiche Attive del Lavoro (ANPAL), *Agenzia*, retrieved from: http://anpal.gov.it/agenzia/Pagine/descrizione-organigramma.aspx





matters, to third parties: the "agenzie del lavoro" (labour agencies). Labour agencies are recognised as such once they are registered in the ANPAL register³.

Legal and ethical controversies

Establishing the legal framework of *who* can administer personnel selection tests – and in particular psychological aptitude tests – is an easy task, however, establishing whether the administration of such tests is ethically and legally licit, is a rather more complicated one. The controversy stems from the invasive nature of many such tests, which trespass the borders of professionally relevant skills and inclinations, and intrude into the candidate's private sphere.

Set aside the ethical considerations of the sanctity of privacy and of the right of a person to keep intimate information – such as their sexual orientation, their intention to have children or their relationship status – from their (potential) employer, the attempt to acquire such information about an employee or candidate to a position is sanctioned in Italian legislation by multiple documents⁴. Article 8 of the Workers' Statute (Statuto dei Lavoratori) establishes the prohibition for an employer (directly or indirectly) to investigate an employee's or candidate's political opinion, religious belief or any other information irrelevant to the evaluation of his/her professional stand, upon penalty of monetary sanctions or even arrest. Article 10 of the "Legge Biagi", legislative decree n° 276/2003 complements article 8 of the Workers' Statute by specifying more in detail the kind of employee's/candidate's information which is protected, such as sexual orientation, ethnicity, family situation, pregnancy, etc.

In a sentence of July 21st 2011 from the Italian personal data protection supervisor (Garante per la Protezione dei Dati Personali), some psychological aptitude tests were invalidated and deemed a breach of the above mentioned regulations because of the invasive enquiries made about the candidates' relationship, sexual, family and health spheres⁵. Although this is not the case for all such tests, it is interesting and important to point out how some can have dangerous implications and consequences.

⁵ Garante per la Protezione dei Dati Personali, (July 2011) *Trattamento di Dati Personali nell'Ambito di una Selezione di Personale - 21 Luglio 2011*, retrieved from: http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/1825852



³ Agenzia Nazionale Politiche Attive del Lavoro (ANPAL), *Agenzie per il lavoro*, retrieved from: http://www.anpal.gov.it/Operatori/agenzie%20per%20il%20lavoro/Pagine/default.aspx

⁴ Maglienti S., (April 2012), *Aziende e Società di Selezione: Utilizzo dei Test Psicoattitudinali*, Il Sole 24Ore: Diritto24, retrieved from: http://www.diritto24.ilsole24ore.com/avvocatoAffari/mercatilmpresa/2012/04/lutilizzo-dei-test-psico-attitudinali-nel-rapporto-di-lavoro.php?uuid=ABmTPkC



Main conclusions:

If, on the one hand, in theory the administration of psychological aptitude tests is attentively regulated by the ANPAL and by the laws protecting employees' privacy, on the other hand the application of the law is sometimes overlooked and such breaches underestimated or unvoiced for fear of losing or not obtaining a job.

For what concerns legislation against discrimination, although it does exist and although it takes into account many aspects of gender inequalities – especially on the workplace and during selection processes – Italian women suffer from a series of structural disadvantages that make it harder for them (especially for working-class and poorly educated women) to access the labour market as their primary role is socially identified as within the family, and the welfare system fails to ensure the possibility to combine child and elderly care with work. Italy thus lacks a transversal (fiscal, educational, cultural, etc.)⁶ policy approach in order for the legislation tackling the gender inequality of opportunities related to work to be effective.

Portugal

In Portugal, only psychologists, enrolled in the Psychologists Association, can apply, or at least code and interpret intelligence and personality tests. The Psychologists Association is a very important institution in what comes to this kind of tests in Portugal, being responsible for regulations in this field.

Concerning one of the GeNeus target group – Public Administration – some selection processes, not all, include intelligence and personality testing that can be performed either by the specific national general office INA (National General Office of Qualification of Workers in Public Sector) or other public departments or private consultancy firms that are authorized by them.

The Portuguese legal framework is quite monolithic: if testing is involved, only these authorized institutions can do it, and they are performed by psychologists, which, in turn, use whatever is defined by their professional association (usually consistent with the scientific field of psychological assessment).

Spain

In Spain there is legal regulation; the body in charge of this regulation is the General Council of Psychology, specifically the Test Commission:

⁶ Rosselli A., (2014) *La Politica sull'Uguaglianza di Genere in Italia*, Dipartimento tematico C : diritti dei cittadini e affari costituzionali, Parlamento Europeo, Bruxelles, p. 28



55



https://www.cop.es/index.php?page=evaluacion-tests-editados-en-espana

The Tests Commission was created in 1995 to try to promote and foster the proper use of tests in Spain. To be able to apply the intelligence tests, a special qualification is required: to possess Psychology Degree and to be part of the Psychologist Association (which is an obligation). For the application of tests in specific areas, such as Clinical Psychology, in addition to the degree and membership, a special accreditation is required, which usually consists of specific training.

Another of the limitations that exist in Spain, is the access to the purchase of evaluation tests, which can only be acquired by people who are collegiate (are part of the Psychologist College – national association).

Finally, there is an ISO 10667 standard from AENOR, which specifies the requirements for the provision of evaluation services: procedures and methods for evaluating people in work and organisational environments, although currently their application is not mandatory.



Part C - Gender Equality (country specific)

Ι. Summary

The aim of this section is to give a short overview of the gender equality situation in the partner countries, especially in these specific fields: (i) education and training, (ii) labour market, (iii) and remuneration.

1. Education

In terms of education the findings of this report are consistent with the common findings:

- More women than men have tertiary education, but women are less represented than men in academic staff and science. Nearly 60% of EU university graduates are women, but they account for less than 33% of scientists and engineers across Europe, yet represent nearly 80% of the total workforce in the health, education and welfare sectors'.
- Also on the other end of the spectrum in most of the partner countries women prevail among the people without any education (Portugal) or among low qualified and NEETs (not in employment, education or training) (Austria)
- In all countries Education and Health and Social Care are the subjects predominantly studied by women.
- Engineering, Manufacturing Industry and Construction are the subjects of study, where women are least represented.
- Women show higher participations rates in training (Austria, Bulgaria)

2. Labour market

Employment rate: Women's employment rates across the EU range from 48% to 80%. but the EU average is 77.4% for men and 65.5% for women (2016g3)⁸. From the partner countries the employment rate for women is above average in Austria and Portugal and below average in Italy and Spain.

Table 18 | Women's and men's employment rate, per Member States, people aged 20-64, 2016 Q3

Place	Men	Women	

Retrieved from: http://ec.europa.eu/justice/gender-equality/economic-independence/index_en.htm

⁸ Report on equality between women and men in the EU (2017), European Commission





1	EU	77.4%	65.5%
2	Austria	80%	71,1%
3	Bulgaria	72%	65%
4	Italy	72%	52%
5	Portugal	75,2%	67,8%
6	Spain	70%	59%

Part-time work: Women work part-time more than men (accounting for over 75% of part-timers), in less valued jobs and sectors9. The average gender gap in part-time employment among parents is 33.1 pp. (percentage points). Part-time work due to looking after children or incapacitated adults disaggregated by sex - men - 4.4%; women – 27.2%.

In most of the partner countries the situation is similar. Women work much more parttime than men do and also men tend to be employed more than women on permanent contracts (Italy).

Representation on decision-making positions:

Across the EU, women are underrepresented in decision-making positions, particularly in politics and business. This is also the situation in the five partner countries.

In May 2016, women accounted for 29% of members of the single or lower houses of parliaments in the EU countries. In business leadership the situation is even worse: in 2016, women accounted for just 23.9% of board members of the largest publicly listed companies registered in the EU countries.

The causes for the underrepresentation of women in decision-making processes and positions are multiple, complex, and call for a comprehensive approach to tackle the problem. They stem from traditional gender roles and stereotypes, the lack of support for women and men to balance care responsibilities with work and the prevalent political and corporate cultures, to name just a few¹⁰.

Table 19 | Representation of women's share on the boards of large listed companies in the EU, 2016¹¹

	Place	Women	
		representatives	
		in %	
1	EU	23,9%	

http://ec.europa.eu/justice/gender-equality/economic-independence/index_en.htm

Gender balance on corporate boards", European Commission, retrieved from: http://ec.europa.eu/justice/gender-page-11 equality/files/gender_balance_decision_making/1607_factsheet_final_wob_data_en.pdf



http://ec.europa.eu/justice/gender-equality/gender-decision-making/index_en.htm



2	Austria	18,1%
3	Bulgaria	15,3%
4	Italy	32,3%
5	Portugal	14,3%
6	Spain	20,3%

"Male" and "Female" occupations

In some of the partner countries "male" and "female" occupations can be identified, according to the percentage of men and women on job:

- In one of the countries it is stated that: Families with employees and domestic staff, Health and social care, Education can be considered "Female Job" and the areas of Extractive industry and Construction "Male Jobs".
- In one of the other countries there is a tendency to think that: the women's
 professions are: Clerical and administrative work, Services and sales; the men's
 professions are: Agriculture, Forestry, Fishery, Crafts, Plant and machine
 operators and Assemblers.

3. Remuneration

At EU level, the gender pay gap is defined as the relative difference in the average gross hourly earnings of women and men within the economy as a whole. In 2015, the EU average is estimated at 16.3 %. Gender pay gap in 2015¹² for the countries, represented in GeNeus project:

Table 20 | Gender pay gap

	Place	Gender Pay Gap in %
1	Austria	18,1%
2	Bulgaria	15,4%
3	Italy	5,5%
4	Portugal	17,8%
5	Spain	14,9%

¹² Report on equality between women and men in the EU (2017), European Commission



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



The Causes¹³:

Some of the factors that contribute to the gender pay gap are:

- Management and supervisory positions are overwhelmingly held by men. Within
 each sector men are more often promoted than women, and paid better as a
 consequence. This trend culminates at the top levels, where amongst CEOs less
 than 6% are women.
- Women take charge of important unpaid tasks, such as household work and caring for children or relatives on a far larger scale than men do. Working men spend on average 9 hours per week on unpaid care and household activities, while working women spend 22 hours – that's almost 4 hours every day. In the labour market this is reflected by the fact that more than 1 in 3 women reduce their paid hours to part-time, while only 1 in 10 men do the same.
- Women tend to spend periods off the labour market more often than men. These
 career interruptions not only influence hourly pay, but also impact future earnings
 and pensions.
- Segregation in education and in the labour market: this means that in some sectors and occupations, women tend to be overrepresented, while in others men are overrepresented. In some countries, occupations predominantly carried out by women, such as teaching or sales, offer lower wages than occupations predominantly carried out by men, even when the same level of experience and education is needed.
- Pay discrimination, while illegal, continues to contribute to the gender pay gap.

The following main findings from the partners' reports can be concluded:

- The biggest gender pay gap among the partners is in Austria, the prevailing picture is one of female earnings as additional household income. One important influence on this situation is the children factor. Women with children earn less than men do, because they take up the majority of unpaid work at home.
- For Bulgaria the gender pay gap comes from two main factors:
 - Women take up less paid jobs in education, administration, services
 - But also there are some sectors of the economy, like scientific research or telecommunications, women are paid much less than men.
- In all countries the gender pay gap is pretty high, excluding Italy. The Italian partner considers this is a result of the different way it is calculated and therefore not comparable to other countries' figures.

¹³ Factsheet: The gender pay gap in the European Union, European Commission





- There is an interesting observation from Portugal that the gender pay gap is closely related to the qualification levels: as the level of qualification increases, the higher the wage gender gap. This is also true for Bulgaria.
- The partners from Spain also conclude that: "The major factors that negatively impact women in terms of salary and professional development are those of women being mostly in poorly paid sectors, lack of access to management positions and their greater involvement in family life."

II. National information

This part of the Generic report presents facts and figures about the education and labour market as well as the training opportunities for each of the partner countries.

1. Austria

The best overview on gender specific differences on the Austrian labour market is delivered by the "Equality index labour market". It provides one aggregate index as well as one for each topic area and also for the nine federal states of Austria. The four main topic areas are:

- Employment
- Income
- Education
- Family

The report makes visible one of Austria's largest problems, how to reconcile family and work, as it aims to show up the transitions between the labour market and the fields of education and family.

In 2013 women only achieved an average 70% of male values in this index. Reasons for such bad performance can be detected as following:

- "Women perform worst in the area of family, which indicated the degree to reconcile family and work. Women achieve on average 38% of males' values in this area that covers parental leave, wages before and after parental leave and parents' labour market integration."
- "Also in the area of income women achieve markedly less than men (67%). The large gender-related income inequalities contribute strongly to the disadvantage of women in this context underlining also the prevailing picture of female earnings





as additional household income. "

- Females also perform worse in the area of employment (81%), especially in the context of working time and presence in the management level. Female labour market position in the area of employment is only partly improved by lower unemployment risks.
- In contrast women achieve better scores than men in the area of education (118%) although females still show higher rates of low-qualified as well as NEETs (not in employment, education or training). Women show higher participation rates in training and are more likely to hold university degree than men.

The labour market position also varies strongly in between the 9 federal Austrian states: While Vienna is much more equal (about 80%); in all other states women reach around two thirds of men. The lowest index is in Vorarlberg and Tirol. This is in spite of the fact that in all states women achieve higher values than men in education.

Gender inequality is larger the stronger labour markets are segregated. Gender differences increase with increasing of the concentration of women within certain occupations or industries.

Differences in earnings already occur at the beginning of the work life and they increase during life time by family related employment discontinuities. While children do not have an effect on the income of men, a large number of women decide to leave the workplace to take care of the children¹⁴. Reasons for this inequality can be mainly found in the fact that women do (as statistics show) 63% of the unpaid work (household, childcare, care of adults and voluntary work – see Statistik Austria 2009) and compared to other European countries there is only a low number of children under 3 Years in institutional care centres.

Austrian family politics focus on transfer payments, which might be economically efficient and which might increase the freedom of selection theoretically (if there are alternative selection possibilities). At the same time politics cannot influence social politics, as transfer payments which are not related to income tend to support and reinforce traditional role models (Del Boca et al. 2007). Political measures which support public child care do definitely have a positive impact on women income and equality¹⁵.

¹⁵ Haan – Wrohlich,(2011), Del Boca – Pasqua, 2005



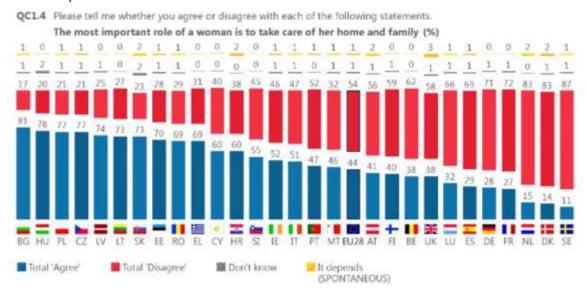
¹⁴ Famira-Mühlberger et al., (2010), Eppel – Famira-Mühlberger – Bock-Schappelwein, 2014



2. Bulgaria

As per a research conducted in 2017 "Bulgaria scored the highest percentage of genderstereotypical thinking. ¹⁶ The EU research shows that Bulgaria is one of the "traditionalist" countries, where society is largely considered to function on the basis of old gender stereotypes. Another example of this is when the question "Should men take paternity leave" was asked, where 68% of Bulgarians were against the idea.

Table 21 | EU research on women role



Source: https://www.euscoop.com/en/2017/11/21/is-bulgaria-bigoted-gender

According the "Global Gender Gap Report 2017"¹⁷ of the World Economic Forum out of 144 countries Bulgaria ranks 18 in terms of the global gender gap score. The country score is 0.756 (where 0.00=imparity, 1.00=parity), which sounds positive, but in terms of:

- Economic participation Bulgaria is N 51 with score 0.710
- Educational attainment N 80 with score 0.990
- Wage equality for similar work N 103 with score 0.634

In **education and training** we have very different situation in the two ends of the spectrum. On one hand we have more women, than men studying at tertiary level:

http://www3.weforum.org/docs/WEF_GGGR_2017.pdf



https://www.euscoop.com/en/2017/11/21/is-bulgaria-bigoted-gender



Table 22 | STUDENTS OF EDUCATIONAL-QUALIFICATION DEGREE, CITIZENSHIP, TRAINING FORM AND GENDER IN HIGHER SCHOOLS IN THE FORM OF OWNERSHIP, IN THE YEAR 2016/2017

(Number)			
	Total	In state high schools	In private high schools
Men	112 396	97 185	15 211
Professional Bachelor	4 918	3 701	1 217
Bachelor	74 591	63 971	10 620
Master	32 887	29 513	3 374
Women	130 803	112 300	18 503
Professional Bachelor	5 417	4 259	1 158
Bachelor	80 646	68 963	11 683
Master	44 740	39 078	5 662

Source: National Statistical Institute

Women are more active than men in life-long learning and are looking for and attaining additional training and education during the course of their life.

At the same time there are slightly more women that have no primary education. Also more men reach secondary education level than women. The reason for this is that many women from the minorities don't go to school at all or give birth to children very early and drop out of school. It is more a cultural problem within the minority group and family itself, than a common problem of discrimination in Bulgarian society.

Women occupy substantial part of Bulgarian labour market and take important positions in regards to the economy and governing of the country. There are plenty of career opportunities for both men and women who are also allowed to develop a multitude of skills during their working time.

Another thing that is important to note is that, while there are women in the parliament and in governing positions, politics are still largely occupied by men. Similar results can be seen in the numbers provided by the Bulgarian National Statistics Institute, where it is seen that as of 2016 54.6% of men were employed, compared to 44.3% of women.



Table 23 | EMPLOYED PERSONS OF THE POPULATION OVER 15 YEARS IN 2016

Sex, Place of residence, Age Degrees of education	Employees - thousands	Employment rates - %	
Total	3 016.8	49.3	
By Gender			
Men	1 607.6	54.6	
Women	1 409.2	44.3	

Statistics from the Bulgarian National Statistics Institute

We can see the big differences in employment parity in the following statistics:

- only 28% of the employers are women
- 37% of the self-employed are women
- women work more in the public sector (which is not so well paid), while men work more in private enterprises
- while 67% of professionals are women, only 38% of managers are women
- the women's professions are clerical and administrative work, services and sales
- The men's professions are agriculture, forestry, fishery, crafts, plant and machine operators and assemblers.

Remuneration: in terms of how the genders are paid in Bulgaria, things are close to the EU average. The average salary of men is about 540 Euro, while women earn 430 Euro. The difference comes mainly from the occupational differences between the genders. Women take more of the less paid jobs in the services sector: i.e. accounting, administration, etc.

In the statistics provided in the table below we can clearly see that while the situation is comparatively good there are still great disparities in how the genders are paid. For example in the field of "Creation and dissemination of information and creative products; telecommunications" women earn only 67% of what men earn. In the field of scientific research women earn 73% of men's salary.

Table 24 | Sector payments by gender

Economic activity	2016 (in BGN)		
Economic activity	Total	Men	Women
Total	11379	12650	10098
Agriculture, forestry and fishing	9260	9590	8396
Mining and quarrying	16676	17086	14588





Manufacturing	10038	11734	8229
Electricity, gas, steam and air			
conditioning supply	20076	20602	18331
Water supply, sewerage, waste			
management and remediation activities	9792	10365	8570
Construction	9289	9159	10146
Wholesale and retail trade; repair of			
motor vehicles and motorcycles	10292	11928	8883
Transportation and storage	10421	10510	10153
Accommodation and food service			
activities	6733	7602	6202
Information and communication	27535	31436	21645
Financial and insurance activities	20126	25704	17452
Real estate activities	10838	11917	9600
Professional, scientific and technical			
activities	16307	19264	14201
Administrative and support service			
activities	8988	8537	10000
Public administration and defence;			
compulsory social security	12909	13689	12497
Education	10784	12590	10345
Human health and social work activities	11769	16882	10409
Arts, entertainment and recreation	9669	11605	7891
Other service activities	7437	8164	7044

Data from the Bulgarian National Statistics Institute 18

3. Italy

When it comes to gender equality, Italy lags behind the European average of the Gender Equality Index¹⁹. The traditional image of women as wives, mothers and housekeepers is particularly strong in Italy to these days – particularly in the south and in working classes – and only 49.1% of Italian women are employed²⁰. This is the result of multiple and transversal factors, among which we can identify some cultural elements and structural barriers, and it reflects differently in women's access to education and to the labour market. Moreover, it is worth mentioning although not central to the present

²⁰ Commissione « Affari costituzionali » della Camera dei Deputati, *Indagine Conoscitiva sulle Politiche in Materia di Parità fra Donne e Uomini*, Audizione del presidente dell'istituto nazionale di Statistica (ISTAT) Giorgio Alleva, (October 2017), p. 10



¹⁸ National Statistical Institute: http://www.nsi.bg/en/content/6439/total-economic-activity-groupings-kind-ownership-gender

European Institute for Gender Equality, *Gender Equality Index 2017*, retrieved from: http://eige.europa.eu/gender-equality-index/2015/countries-comparison



enquiry, that sexual assaults and violence against women constitute a field in which legislation needs to advance at a steadier pace (for example, rape has only been recognized as a crime against a person as opposed to against public morals in 1996²¹).

The gender equality situation in Italy: exploring cultural and structural barriers for women's full participation in society.

Although the causes for this phenomenon are deeply rooted and intertwined, although they are transversal and extremely complex to address, it is possible to identify, in the Italian case, two main categories of factors hampering the achievement of gender equality: cultural elements and structural barriers.

Cultural elements: Traditionally characterized by a rather patriarchal society based on a fixed ideal of family and of its centrality to the social structure, Italy underwent major cultural changes that led to advancement towards gender equality during the 60s-70s. The post-World War II period saw a bursting economic growth, with consistent movements of people emigrating from the countryside to the city and from the South to the North, where the biggest industrial poles were located. The generation of the "baby boomers", who grew up between 1958 and 1963, were the ones who started to question the traditional societal structure in the 70s, starting the feminist movement in Italy and obtaining a number of victories. Although the principle of equality between men and women is enshrined among the main articles (Article 3) of the 1948 Constitution – which is still currently in force - until the 60s-70s little or nothing was done to put it into practice. During this time, Italian women gained the right to divorce, the right to abortion (even though to these days this is strongly hampered by the right for doctors to deny abortions based on their personal beliefs, the so-called "obiezione di coscienza" 22), and obtained the abolition (in the 80s) of the infamous "delitto d'onore", which implied strong mitigating circumstances in cases of husbands murdering their adulterous wives and rapists marrying their victims²³.

However, women civil rights movement faced a halt in the 80s – 90s, and the patriarchal cultural substratum turned out to be particularly hard to eradicate.

Italian patriarchy has deeply rooted ties to the Roman Catholic Church, which has historically had a pivotal role in the country's social, cultural and political life. In catholic mythology, women are created from a man's rib, they are the tempters generating the original sin, and they have no place in the Church's leadership. The catholic Church

few-doctors-will-perform-them.html
²³ Rosselli A., (2014) *La Politica sull'Uguaglianza di Genere in Italia*, Dipartimento tematico C : diritti dei cittadini e affari costituzionali, Parlamento Europeo, Bruxelles, p.9



²¹ Rosselli A., (2014), p. 18

Pianigiani G., (January 2016) *Italy allows Abortions, but in reality, Only a Few Doctors will Perform them,* The New York Times, , retrieved from: https://www.nytimes.com/2016/01/17/world/europe/on-paper-italy-allows-abortions-but-few-doctors-will-perform-them.html



reserves for women a clearly subordinated role, and in a country where 3 quarters of the population declare to be catholic²⁴ and 52% declare trusting the Church, such vision has a strong (though declining) impact. Moreover, the Catholic vision also has an impact on the structural organisation of the Italian society, which revolves around the traditional family as the main source of welfare, confining women to their domestic roles²⁵.

Although the above-depicted situation may seem quite bleak, steps forward have been made in including in the legislation provisions aimed at improving the situation. In fact, in Italy today, for as strongly cultural traditionalist factors can influence the general debate on gender equality, legislators are trying to update policy in this direction. The main element policymakers need to take into account when tackling the issue of gendered discriminations on the workplace is that some stem from structural barriers mainly linked to the conciliation of private life and working.

For many transversal reasons, in fact, in Italy families represent the main source of welfare for what concerns children and elderly care (so called "Mediterranean welfare"26). These tasks traditionally impend upon women's shoulders, and results in their confinement at home. In fact, although parental leaves are among the most generous in Europe (5 months for women's mandatory maternity leave, and up to 10 months in total for the couple), beyond that public childcare structures are extremely poor, and 46% of inactive women declare having left their jobs because of the struggle of conciliating their private life and work²⁷. This phenomenon is even more accentuated because of the regional governments' sponsorship of welfare services linked to elderly and children care, resulting in the virtual non-existence of the latter in some regions, especially in the south. As a result, only women who can afford private care for their children and elderly can afford to access the labour market, deepening different types of inequalities: the employment gap between men and women is in fact larger in positions that require low skills, while it shrinks in the ones that require higher education and skills.

These structural barriers make most policies against discrimination superfluous as they don't address the upstream difficulties in accessing the labour market, especially for working-class women. Last but not least, the rarefaction of permanent positions due to the recent economic crises and the evolution of the labour market has had the tragic ripple effect of turning pregnancy or even the intention to have one into a discriminatory element during recruitment processes (although inquiring about any of the two



²⁴ http://www.doxa.it/religiosita-e-ateismo-in-italia-nel-2014/

²⁵ Rosselli A.,(2014) p.22

²⁶ Rosselli A., (2014), p. 26



constitutes a major breach of the afore-mentioned "Legge Biagi"²⁸ and Code for Equal Opportunities for Men and Women²⁹).

The Gender Equality Situation in Italy: repercussions of cultural and structural barriers on women's access to tertiary education and the labour market in Italy.

All of the above-mentioned has important repercussions on women's access to tertiary education and the labour market. Traditional subject divides emerge in the academia, with a staggering gap between the percentage of female students in tertiary education and of female faculty members.

When it comes to **education**, indicators clearly show a gender division which has evolved in favour of women. In 2016, among over 60 years old population, only 8.7% of men and 4.9% of women hold a tertiary education degree (university degree, masters, PhD), while in the younger age group of 25 to 29 years old, 30.8% of women hold a tertiary education degree, compared only 19.0% of men³⁰. However, the typical gender divide between humanities and scientific subjects is still present: in the year 2016, only 31.3% of graduates in sciences were women and 24.3% in engineering; while 68.4% of graduates in literature were women. It is worth noticing, however, that women also represented in the same year 68.4% of medicine graduates and 66.2% of biology graduates³¹. It can be then deduced that although some domains remain typically maledominated (such as engineering, mathematics, physics); women are gaining representation in scientific subjects, especially in the fields of medicine and biology.

If on one hand women students are generally more represented than men, graduate more, and are gaining grounds in the sciences, on the other, the number of female faculty members is remarkably low (especially if compared to the first indicator). In fact, as of 2016, women made up only 7.6% of industrial and information engineering faculty members in Italy, 11.1% of physics, and even in fields which register a marked majority of female students such as medicine (where 68.4% of graduates in 2016 were women), only 14% of faculty members are women³². These numbers show that women's access to higher education is not hampered by discriminatory behaviours: in a country where

³¹ ISTAT (2017), Chapter 7, Table 7.6, p. 237 ISTAT (2017) Chapter 7, Table 7.10, p. 240



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²⁸ Camera dei Deputati, *Attuazione delle Deleghe in Materia di Occupazione e Mercato del Lavoro, di cui alla Legge* 14 febbraio 2003, n. 30, Gazzetta Ufficiale n. 235, October 2003, retrieved from: http://www.camera.it/parlam/leggi/deleghe/03276dl.htm

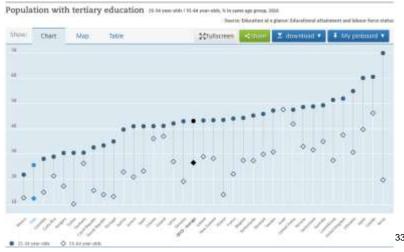
²⁹ Camera dei Deputati, *Codice delle Pari Opportunità fra Uomo e Donna, a Norma dell'Articolo 6 della legge 28 novembre 2005, n. 246*, Gazzetta ufficiale n. 125, May 2006, retrieved from : http://www.camera.it/parlam/leggi/deleghe/06198dl.htm

³⁰ ISTAT, *Istruzione e Formazione*, Chapter 7, Rapporto Annuale 2017, 2017, Figure 7.5, p. 224-225, retrieved from : http://www.istat.it/it/files/2017/12/C07.pdf



only 25.6% of the population aged 25-34 years old holds a degree, one of the lowest indicators among OECD members, the main discriminatory element for access to education is economic and cultural inequalities:

Table 25 | Population with tertiary education



However, as shown by the afore-mentioned numbers, when it comes to entering the highly hierarchically structured and male-dominated world of faculty members and professors, women face more – predominantly cultural – barriers to the access.

In regards to the women on the labour market: the high percentage of women graduating from university has a clear repercussion on their presence on the labour market. In fact, Italy boasts one of the lowest gender wage gaps in Europe, but this is due to the fact that women are more present in higher level positions³⁴. This effect is also due to the difficulties mentioned in conciliating family and work: women who can afford private childcare are often the ones who come from middle to upper-middle classes and could also afford an education.

The unemployment rate in Italy is of 10.9% for men aged 15 and older and 12.8% for women aged 15 and older in 2016, while the percentage of those not participating to the labour market³⁵ is of 18.2% for men and 25.9% for women, for the same year and age

³⁵ Those who are considered as not participating to the labour market are the ones who are not actively looking to be employed, but would potentially be willing to work.



³³ OECD Data (2016), *Population with Tertiary Education,* retrieved from:

https://data.oecd.org/eduatt/population-with-tertiary-education.htm

34 Rosselli A. (2014) *La Politica sull'Uguaglianza di Genere in Italia*, Dipartimento tematico C : diritti dei cittadini e affari costituzionali, Parlamento Europeo, Bruxelles, p. 22



range³⁶. When looking into the distribution of types of work by gender, it emerges that men are more employed with standard full-time contracts (83% of employed men) than women (59.8% of employed women), while more women than men are employed part-time: 26.4% compared to only 6.3%. Another interesting indicator emerging is that women are less likely than men to be employed with a permanent contract: 12% of women are employed with a fixed-term contract, compared to only 9.7% for men³⁷.

As aforementioned, Italy has one of the lowest gender pay gaps in Europe, only slightly higher than 5%. However, more than to a fair distribution of labour and wages, this is due to the way this number is calculated on the basis of average pays and it is thus distorted by the low number of women working in low skills positions, which have lower pays.

Conclusions: the gender equality situation in Italy is quite bleak, due mainly to a cultural patriarchal mind-set which heavily influences individual behaviours and policy making, thus creating a series of barriers preventing women from participating to society to their full potential. However, the encouraging figures in the field of education suggest a potential for positive evolution and a heightened sensitivity to gender issues, which would allow for a development of legislation aiming at empowering women from any social background to access the labour market.

4. Portugal

According to the most recent report on Portuguese Gender Equality³⁸, specifically on education, the key-indicators show that in every 100 people without any education, 71% are women and 29% are men. On the other hand, in every 100 people with higher education, about 60% are women and about 40% are men.

Table 26 | Students in Higher Education

Years					
	Total	Men		Women	
		N	%	N	%
1978	81.582	47517	58.2	34065	41.8
1981	83.754	46012	54.9	37742	45.1

³⁶ ISTAT, *Il Mercato del Lavoro: la Lenta Ripresa e le Disparità nei Gruppi Sociali,* Chapter 4, Rapporto Annuale 2017, 2017, table 4.4, p.154, retrieved from:

information contained therein.

³⁸ CIG (2017) Comissão para a Cidadania e Igualdade de Género



https://www.istat.it/it/files/2017/05/RA2017_cap4.pdf tavola 4.4

³⁷ ISTAT (2017) Chapter 4, Table 4.3, p. 152



1991	186.780	80888	43.3	105892	56.7
2001	387.703	166661	43.0	221042	57.0
2011	396.268	184627	46.6	211641	53.4
2017	361.943	167919	46.4	194024	53.6

Source: DGEEC/Med, MCTES, DIMAS/RAIDES, PORDATA

Regarding technical areas (CIG, 2017), from a longitudinal perspective, there is a downward trend in relation to women graduates in TIC area (Technologies, Information and Communication), except in 2010, when a slight increase has been observed, although it is not significant and has not yet reached the levels obtained in the year 2000.

Table 27 | Female rate in Higher Education: total and by area of education and training

	Areas	of Educat	ion and Tra	aining					
Years	Total	Education	Humanities	Sciences,	Sciences, Mathematics Computing	Engineering, Manufacturing Industry and Construction	Agriculture	Health and Social Care	Services
1991	56.7	83.6	73.1	56.2	64.2	28.7	48.1	71.7	43.6
2001	57.0	81.5	66.9	60.0	52.0	29.8	54.4	75.9	46.0
2011	53.4	81.7	55.8	57.8	46.5	26.9	54,.8	77.5	41.4
2017	53.6	79.3	59.0	59.5	44.2	27.5	57.3	77.0	42.1

Source: PORDATA

Table 2, based on database Pordata (2017), reveals that Education (79.3%) and Health and Social Care (77%) are the highest score areas of education and training among women. On the opposite side, comes the area of Engineering, Manufacturing Industry and Construction (27.5%).

Key-indicators on labour market (CIG, 2017) show that female employment rates remain significantly below male employment rates - the employment rate is higher for men (6.8 percentage points more). Gender gap on the labour market is a fact. Regarding to the Portuguese context, in June 2017, a law was approved that obliges public and quoted companies to hire more women to oversight bodies and to their boards of directors.





Despite this public attention, according to recent data from CIG (2017), women are under-represented in management and executive levels/positions (boards of directors of companies). In April 2016, the presence of women on the boards of directors of the companies of PSI 20 in Portugal was still 14% (9% in 2015) and that of men was 86%. In the EU28 the average is 23% for women and 77% for men. This means that the situation has not changed significantly in recent years and more must be done.

Data from 2014 (CITE) shows that it is possible to identify "female jobs" and "male jobs", according to the percentage of men and women on the job. In this way, we can consider the area of work on *Families with employees and domestic staff* (98.3%) as a "Female Job" and the areas of *Extractive industry* (96.2%) and *Construction* (94.0%) as "Male Jobs".

Figure 1 | "Female Jobs" versus "Male Jobs"

"Female Jobs"

- "Families with employees and domestic staff" (98.3 %);
- •"Health and social care" (81.9 %);
- •"Education" (77.9 %);
- "Specialists in intellectual and scientific activities" (60.4%).

"Male Jobs"

- "Extractive industry" (96.2%);
- "Construction" (94.0%);
- "Transport and storage" (81.3%);
- "Electricity, gas, steam, hot and cold water and cold air" (80.8%);
- "Capture, treatment and distribution water; sanitation, waste management and depollution" (79.4%).

Source: Adapted from CITE (2014)

Regarding remuneration, women still earn less than men (CIG, 2017). The average basic salaries are higher for men: on average, men earn 990.05 Euros of basic monthly remuneration, while women earn 824.99 Euros. There is a gender gap of 16.7%.

The gender pay gap is closely related to qualification levels (data concerning 2015): as the level of qualification increases, the higher the wage gender gap is. This is particularly evident among higher positions.





5. Spain

Of the 17 organisations, 90% of those surveyed said that there are inequalities between men and women. Furthermore, the organisations highlighted the existence of inequality in the following areas:

- 1. Salary inequality even when at the same level and with the same years of experience. Inequality among those, who hold the same position (especially low level positions).
- 2. Quantitative and qualitative differences according to gender. The labour market is less favourable towards women.
- 3. Differences in ratios of unemployment.
- 4. Inequality between men and women in:
- Training: especially in the choice of academic training.
- Work: some degrees are more specifically seen as feminine e.g. psychology, although a higher proportion of men find employment.
- Education: It is least notable here. However, in some families (of lower educational achievement) patterns are repeated and this leads to less education for women.

Only one of the organisations indicates that they promote gender equality programmes even when there are a higher percentage of women (58.06% women, 41.94% men) employed. The following summarizes various significant comments provided by the different target group organisations:

- For one of the organisations gender equality is a global issue, as described in a recent article published online (5/10/2017) which states 'No country manages to achieve gender equality and there is no good reason for this.' 'Gender equality is a fundamental right. Furthermore, it is essential for the welfare and economies of the societies'. That is the opening of an extensive report from the OECD entitled "Seeking gender equality: an uphill battle". It calls for governments to take action and asserts that countries have achieved little progress in the last 5 years. It goes on to state that women are at a disadvantage in all areas of life and in all countries, in terms of work, leadership and politics.
- Public entities in Spain are working to foster equality. Salary discrepancies are more noticeable in the private rather than the public sector. Unemployment among women is higher in all age groups.





- One PA says that there are more women at an intermediate level in technical and management positions.
- The main difficulty for real gender equality lies in ideological, cultural and social customs, which are still rooted in a significant part of society. Religious groups and organisations, which carry much weight in education, culture and in social habits, have not taken an unequivocal stance against discrimination, but have rather acted to the contrary. During the dictatorship there were laws that severely restricted women's rights, but these were abolished as the democratic state developed. However, there are still situations of real discrimination in private life. Many still believe that it is only women's obligation to take care of domestic chores and look after children, no matter whether they have a job or not. In addition, timetables at work, at schools, and state kindergartens do not make any provision at all, for work-family life balance. This only adds to discrimination against many women.
- There is also much work to be done in terms of gender language, as well as in leadership positions for women in business and sport.
- One of the organisations stresses that they have no gender discrimination and, indeed, promote the participation of women in training activities.
- Other organisations highlight the fact that most university students in Spain are women. Nevertheless, this is not reflected in the workforce where more men than women are active. There is still a significant pay gap between men and women. Fewer women in the workforce, lack of access to management positions and family commitments continue to have a seriously negative impact on both salary and professional development.

Besides the contributions made by the interviewed organisations, it is worth to share information about the situation and inequality between men and women in the Regional Administration of Murcia. In the Regional Administration there is also what is known as the "glass ceiling", despite the fact that women represent 64.52% of the workforce compared to 36% of men, women do not achieve positions of responsibility to the same extent as men do. In the professional categories, where female representation can be equated (50.93% compared to 49.07% of men), women are mostly qualified in fields such as psychology, pedagogy, nursing or social Work. However, among men engineers and computer scientists predominate.

Within this category, men hold 58% of the top positions compared with 42.11% of women:

• In high management positions men represent 54.50%.





• In middle management women represent 57.50%. In the lower categories, the percentage of women range between 85% and 93%.

This brief review gives us an approximation to the situation in Spain, which shows the current differences in gender equality between men and women; thus, in the field of Public Administration, the situation is more favourable than in the field of private enterprises, although, as per all the organisations interviewed, there is still a lot of work to be done.

Country specific statistics Statistical tables in relation to employment and academic training follow.

1. Employment rates according to levels of education Spain- EU.

Table 28 | Unemployment rate, according to level of education and period. Spain, EU-27 and EU-28 (from 20 to 64 years old)

Units: Percentage	2016	2015	2014	2013	2012
Spain		•	•		
Males					
Total	69.6	67.6	65.0	63.4	64.6
Prep school, primary and 1st stage of secondary education (level 0-2)	61.6	59.0	55.6	54.1	55.5
2nd stage of secondary education (level 3-4)	68.1	66.4	64.2	63.0	64.7
Higher education (level 5-6)	81.6	80.5	79.0	77.7	78.7
Females		<u> </u>	<u> </u>		
Total	58.1	56.4	54.8	53.8	54.6
Prep school, primary and 1st stage of secondary education (level 0-2)	42.8	41.2	40.0	39.4	40.3
2nd stage of secondary education (level 3-4)	56.4	55.1	53.9	53.7	55.5
Higher education (level 5-6)	74.8	73.4	72.1	71.0	72.1
Brecha de género (hombres - mujeres))				•
Total	11.5	11.2	10.2	9.6	10.0
Prep school, primary and 1st stage of secondary education (level 0-2)	18.8	17.8	15.6	14.7	15.2
2nd stage of secondary education (level 3-4)	11.7	11.3	10.3	9.3	9.2
Higher education (level 5-6)	6.8	7.1	6.9	6.7	6.6
EU-28					
Males					
Total	76.8	75.8	75.0	74.3	74.6
Prep school, primary and 1st stage of secondary education (level 0-2)	63.6	62.3	61.3	60.8	61.8

information contained therein.



2nd stage of secondary education (level 3-4)	77.2	76.3	75.7	75.0	75.3
Higher education (level 5-6)	87.1	86.4	85.7	85.5	85.7
Females			I	L	
Total	65.3	64.2	63.4	62.6	62.4
Prep school, primary and 1st stage of secondary education (level 0-2)	43.4	42.8	42.5	42.1	42.7
2nd stage of secondary education (level 3-4)	65.7	64.8	64.2	63.4	63.5
Higher education (level 5-6)	80.2	79.5	78.8	78.4	78.5
Brecha de género (hombres - mujeres))				
Total	11.5	11.6	11.6	11.7	12.2
Prep school, primary and 1st stage of secondary education (level 0-2)	20.2	19.5	18.8	18.7	19.1
2nd stage of secondary education (level 3-4)	11.5	11.5	11.5	11.6	11.8
Higher education (level 5-6)	6.9	6.9	6.9	7.1	7.2
UE-27		•			
Males					
Total	76.9	75.9	75.1	74.4	74.7
Prep school, primary and 1st stage of secondary education (level 0-2)	63.7	62.4	61.3	60.8	61.8
2nd stage of secondary education (level 3-4)	77.4	76.4	75.8	75.2	75.5
Higher education (level 5-6)	87.1	86.5	85.8	85.5	85.8
Females			•		
Total	65.3	64.3	63.5	62.7	62.5
Prep school, primary and 1st stage of secondary education (level 0-2)	43.5	42.8	42.6	42.2	42.8
2nd stage of secondary education (level 3-4)	65.8	64.9	64.3	63.5	63.6
Higher education (level 5-6)	80.2	79.5	78.8	78.5	78.5
Brecha de género (hombres - mujeres))				
Total	11.6	11.6	11.6	11.7	12.2
Prep school, primary and 1st stage of secondary education (level 0-2)	20.2	19.6	18.7	18.6	19.0
2nd stage of secondary education (level 3-4)	11.6	11.5	11.5	11.7	11.9
Higher education (level 5-6)	6.9	7.0	7.0	7.0	7.3
Course Furences Labour Force		<u> </u>		•	

Source: European Labour Force Survey (LSF). Eurostat.

2. Gender pay gap by age and period in Spain. Fuente: Instituto Nacional de Estadística

The pay gap in Spain stood at 23.2% in 2014 (based on a recent trade union report in conjunction with the National Institute of Statistics). The pay gap has not been reduced,

information contained therein.





but rather widened during the time of the crisis, from 22.5% in 2010 to 23.2% in 2014. According to the European Commission the gap in Europe stands at 16%.

In conclusion, Spanish, European and international legislation is clearly in favour of pay equality for men and women. However, powerful social factors continue to contribute towards the fact that equality is still far from being achieved. The major factors that negatively impact women in terms of salary and professional development are those of women being mostly in poorly paid sectors, lack of access to management positions and their greater involvement in family life. Measures such as affirmative action (quotas) in management positions and equality in maternity and paternity leave have given rise to advances in reaching a measure of parity. In conclusion, legislation has advanced, but society has not done so to the same degree.



Part D - Test Availability

I. Summary

The representatives of the researched groups in different countries provide the following feedback in regards to use of tests:

- They prefer interviews to tests;
- When they use tests they use both their own test and questions and standardised such;
- Mostly the Public Administration and the Consultancies (either career or recruitment consultancies) use standardised tests.

Most often used tests are:

- personality tests MMPI, Rorschach, 16PF, NEOPI-R, DISC
- intelligence tests Wais, BPRD + Differential Reasoning Test Battery, PMI4p83 - Immediate Memory Tests, BTA-p83 - Attention Test Battery, CPM - P (Raven)
- professional competencies ABA-p83 Basic Administrative Skills
- personal preferences CIPSA Professional Interests Questionnaire, IPP-R -Inventory of Professional Interests and Preferences - Revista, RUMOS -Inventory of Vocational Preferences (2015)
- emotional and social intelligence D48, D70 Dominoes test (non-verbal, crosscultural intelligence)

The test batteries that GeNeus project partners plan to develop will have to be qualified not as intelligence and personality tests, because otherwise it needs to undergo a long process of standardization (If such tests are not standardised, people will be reluctant to use it). The main reason for not going on the route of test standardization is that the project timeframe is insufficient for the standardization in some of the partner countries.

II. National Information

Austria

Usually there are two main actors involved in constructing these tests: 1. academics and 2. consultants. Typically, a test was completed within a PhD or Master's degree according to its complexity. They are then marketed by the authors themselves or, most of the time, by companies prepared for the purpose.





Some of the consultants (CEGOG, SHL, EDIPSICO, Hogfred, Gallup, etc.) collect a set of tests and create their own test batteries in Assessment Centers, selling complete services to companies, certifying test applicators and other organisations.

Some companies have also created specific sets of skills for specific sectors, such as industry or others.

Bulgaria

Currently in Bulgaria only 32 psychological tests are standardised for application. These tests are either translated and adapted for Bulgaria or developed locally. Currently mainly one company (OS-Bulgaria) and the Bulgarian Academy of Science have the rights to apply them. Only 8 of the standardised and registered tests are with Bulgarian origin, but none of them is related to performance testing. These are tests about psychological disorders.

The test batteries that are going to be used in Bulgaria will have to be qualified not as intelligence and personality tests, because the long process of standardization can never be finished within the timeframe of the project.

<u>ltaly</u>

While doing the research, it has been found out the target groups use their own test and questions as shown above in the first sections of this research. In the case of the Public Administration, they use standardised tests such as personality tests like MMPI, Rorschach and intelligence tests such as Wais.

Portugal

In this section, is given a brief overview about current use of tests regarding personality, social intelligence and intelligence in Portugal. The figure below presents the most used tests in these fields. There is a huge market related to these tests in Portugal.

Figure 2 | Tests used





PUBLIC ADMINISTRATION CANDIDATES

- •BPRD + Differential Reasoning Test Battery
- •PMI4-p83 Immediate Memory Tests
- •ABA-p83 Basic Administrative Skills
- •BTA-p83 Attention Test Battery

VOCATIONAL SERVICES
SCHOOLS

- •BPRD + Differential Reasoning Test Set
- CIPSA Professional Interests Questionnaire
- •IPP-R Inventory of Professional Interests and Preferences Revista Revista
- •RUMOS Inventory of Vocational Preferences (2015)

PRIVATE SECTOR (SMES)

- ·WAIS
- •CPM P (Raven)
- •D48
- •D70
- Specific tests from specific organization (Edipsico, CEGOG, SHL)
- •16PF
- NEOPI-R
- DISC

Source: Adapt from EDIPSICO, CEGOG and SHL web pages

The most often used intelligence tests are *G-factor tests* (general intelligence), such as *Domino*, *Raven's Progressive Matrices*, and *Wechsler Adult Intelligence Scale (WAIS)*. There are also the *Battery of Differential Reasoning Tests* (BPRD) that measure abstract, numerical, spatial, mechanical, and verbal intelligence. There are quite a few personality tests, but the most used are *16PF* and *NEOPI-R*. According to Almeida, Araújo and Diniz (2013), the use of psychological tests is usually hampered: 1) by the lack of updating of the most recent tests; 2) by the lack of cultural equivalence; 3) by the lack of continuous training of psychologists in terms of psychological evaluation; and 4) by the lack of technical and ethical orientations, or the reduced dissemination of standards of international organisations (AERA, APA, & NCMEA, 2014). On the other hand, due to the cost, as well as the required expertise and time for the use of





intelligence and personality tests, the professionals have come to use other types of instruments such as cognitive style, interests and values tests.

There are also other forms of psychological assessment. Usually the gender variable is controlled, both in the test construction phase and in the empirical analysis phase of the results. Maybe the biggest gender bias problem relates more to the interview, as well as to the interviewer, or later in the process to the person responsible for making decisions about the use of the technical information provided by the results.

Three main tendencies characterize the field tests in Portugal: 1. No tradition in sharing data, 2. Expensive information and 3. Strong market lobbying.

Spain

Tests available for free. The information gathered from the research institutions show that: 5 are unaware of the availability of free testing, 9 do not provide a response, one made a test available to GeNeus, 1 does not know about test availability and usage; 1 insists that there is no free test at all.

Regarding the commercialisation of tests: 15 do not respond to this question, 1 does not know about it and 1 knows. Some test examples follow:

- In Murcia: Dimaps specialised bookshop http://dimaps.es/
- Internet: DISC http://certificacion.ttisuccessinsights.es/
- Insight Discovery https://www.insights.com/es/ (evaluates team work skills)
- Radar 30 http://people-performance.com/cat/radar-lideratge



Part E – EU wide research

I. Intelligence Concepts

1. Introduction

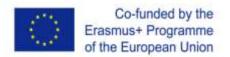
What is intelligence? It is a strongly debated topic that has stayed so throughout the last century. There is no clear agreement as to what constitutes IQ or how to measure it. Simply put by the dictionary intelligence is "the ability to learn and apply knowledge and skills"³⁹. Or widely defined by APA (American Psychological organisation) – "Intelligence refers to intellectual functioning". How many factors this would have and how they interact is a very vast topic in the field of psychology.

There have been many intelligence theories and ways to view the subject throughout time. It has been an ever-evolving topic in psychology throughout the last century, one that has yet no clear answer as to how it works. While many different theories have been proposed one of the most widely known is the two-factor theory coined by Charles Spearman (1904, 1923) in the beginning of the 20th century. The two-factor theory in its conception was a raw view of how our intelligence can be divided and measured. Another interesting view on how our intelligence works was coined by Howard Gardner (1983, 1993) and his theory of multiple intelligences. According to Gardner people have modalities that divide our intelligence and these modalities work apart from one another. The first to turn his attention to the practical aspects of intelligence and how we apply it in order to navigate in life is Robert Sternberg. Then there are different ideas that change how we see our intelligence as a whole akin to the one by David Perkins, where he argues that intelligence can be taught. "We can become more intelligent through study and practice, through access to appropriate tools, and through learning to make effective use of these tools (Perkins, 1995)".

"The following definition is a composite from various authors. Intelligence is a combination of the ability to:

- a) Learn. This includes all kinds of informal and formal learning via any combination of experience, education, and training.
- b) Pose problems. This includes recognizing problem situations and transforming them into more clearly defined problems.

³⁹ Merriam-Webster dictionary





c) Solve problems. This includes solving problems, accomplishing tasks, fashioning products, and doing complex projects."⁴⁰

The newest developments in the field of intelligence are related to Emotional and Social Intelligence.

2. The two-factor theory

According to this theory there are two main factors (determinants) of intelligence as the name suggests and these are: g-factors (general) and s-factors (specific cognitive skills). It is important to note that the two parts were developed simultaneously and thus they work off one another and are to be considered as one full theory on how intelligence works. Everything began from factor analysis, which is a way of finding correlations while doing research and Spearman used this to test people in different fields which he thought were correlated to intelligence, mainly looking at mathematical and directional skills, distinguishing the pitch of sound, perceiving colour and weight. After his experiments Spearman noted that there was a correlation when people do good in certain areas and bad in other. He believed there to be a general intelligence behind all skills that humans possess and he called it *g*.

1) *g - middle general intelligence*

Spearman identified *g* as the centre of all the other factors of intelligence. The other specifics all combine together to form the **middle general intelligence** and all should be measured from there.

2) S – specific abilities

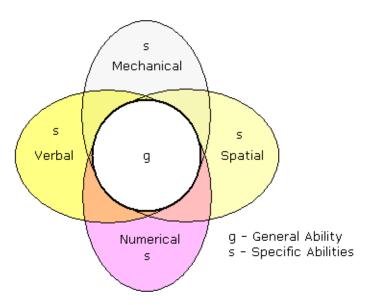
The second important part from Spearman's theory, the s, is a combination of 4 specific abilities and the most important ones are verbal, mechanical, spatial and numerical. They were chosen because of how important they are in our society and how much they are used in everyday life. The recognition and use of these four basic abilities is an inescapable part of being able to function in society.

Figure 3 | Basic abilities

⁴⁰ Moursund, D.G. (1996). *Increasing your expertise as a problem solver: Some roles of computers.*







A representation of how g and s are visualized by Spearman.⁴¹

3. Primary mental abilities theory

The second major development on the topic of intelligence concerns the Primary mental abilities, a theory, developed by Louis Leon Thurstone (1924), built on the blocks set by Spearman. He lined out what he thought were the seven mental abilities that factor into a person's intelligence and can be used to identify it and then measure it properly. The abilities according to Thurstone are:

- Numerical comprehension (N);
- Spatial relation (S);
- Verbal comprehension (V);
- Word fluency (W);
- Reasoning (R);
- Perceptual speed (P);
- Memory (M).

This new development on intelligence was created by Thurstone's disagreeing with Spearman and his theory of general intelligence. He wanted to show that there are multiple factors that go in our overall intelligence and that they are not connected. In the



⁴¹ vaseeredu.blogspot.bg/2015/06/two-factor-theory-of-intelligence



end his formulas actually showed that we have one underlying form of intelligence just as Spearman actually believed, but also that there are far more abilities included in it. Thrustone's findings are important as they were used for the creation of today's IQ tests.

4. Theory of multiple intelligences

Some researchers in the field of intelligence have long argued that people have a variety of different intelligences. A person may be good at learning languages and terrible at learning music--or vice versa. A single number (a score on an IQ test) cannot adequately represent the complex and diverse capabilities of a human being.

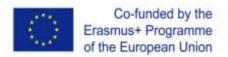
Next major development in the field was Howard Gardner's Theory of multiple intelligences, who built upon Thurstone's ideas in the 1980's. He originally identified 7 components of intelligence. It is important to note that according to this theory all intelligence types are divided and function apart from one another. According to him people could be naturally more gifted in one or more of the areas, but they would have at least some intelligence in each area. What set Gardner apart from Thurstone was his inclusion of several factors and altering of others. For example, the addition of musical understanding in the mix is an interesting and previously unaccounted for in any of the studies. He also believed that if anyone had a high musical intelligence quotient they would be very good at the subject, meaning they could sing well and have a very good understanding of music in general. More recently, Gardner has added an eighth intelligence to his list (Educational Leadership, 1997).

The following table lists the eight intelligences identified by Howard Gardner. It provides some examples of the types of professionals who exhibit a high level of intelligence.

Table 29 | Examples of each of the eight intelligences. 42

Intelligence	Examples	Discussion
11 -	Dancers, athletes, surgeons, crafts people	The ability to use one's physical body well.
Interpersonal		The ability to sense other's feelings and be in tune with others.
Intrapersonal		Self-awareness. The ability to know your own body and mind.

⁴² http://otec.uoregon.edu/intelligence.htm





	effective use of their other intelligences	
Linguistic	Poets, writers, orators, communicators	The ability to communicate well, perhaps both orally and in writing, perhaps in several languages.
Logical- mathematical	Mathematicians, logicians	The ability to learn higher mathematics. The ability to handle complex logical arguments.
Musical	Musicians, composers	The ability to learn, play and compose music.
Naturalistic	Biologists, naturalists	The ability to understand different species, recognize patterns in nature, classify natural objects.
Spatial	Sailors navigating without modern navigational aids, surgeons, sculptors, painters	The ability to know where you are relative to fixed locations. The ability to accomplish tasks requiring three-dimensional visualization and placement of your hands or other parts of your body.

5. Tri-archic Theory of Human Intelligence – Robert Sternberg (1988, 1997)

Robert Sternberg developed the tri-archic theory of intelligence, which is based on a broader definition of intelligence than was typically used. "In this theory, intelligence is defined in terms of the ability to achieve success in life based on one's personal standards – and within one's socio-cultural context. The ability to achieve success depends on the ability to capitalize on one's strengths and to correct or compensate for one's weaknesses. Success is attained through a balance of analytical, creative, and practical abilities—a balance that is achieved in order to adapt to, shape, and select environments."

It discerns 3 aspects of intelligence:

- Practical intelligence the ability to do well in informal and formal educational settings; adapting to and shaping one's environment;
- Experiential intelligence the ability to deal with novel situations; the ability to effectively automate ways of dealing with novel situations so they are easily handled in the future; the ability to think in novel ways.

⁴³ http://education.stateuniversity.com/pages/2104/Intelligence-TRIARCHIC-THEORY-INTELLIGENCE.html





• Componential intelligence - the ability to process information effectively. This includes metacognitive, executive, performance, and knowledge-acquisition components that help to steer cognitive processes.

Sternberg provides examples of people who are quite talented in one of these areas but not so talented in the other two.

6. Learnable Intelligence - David Perkins (1992, 1995)

In his 1992 book, Smart Schools, David Perkins analyses a number of different educational theories and approaches to education. His analysis is strongly supportive of Gardner's theory of multiple intelligences. Perkins' book contains extensive research-based evidence that education can be considerably improved by more explicit and appropriate teaching for transfer, focusing on higher-order cognitive skills, and the use of project-based learning.

He also defines three major components or dimensions of intelligence and supports his theory with extensive research. The three components according to Perkins are:

- a) Neural intelligence. This refers to the efficiency and precision of one's neurological system. There is general agreement that neural intelligence deteriorates if not used, but also that it can be maintained and increased by use.
- b) Experiential intelligence. This refers to one's accumulated knowledge and experience in different areas. It can be thought of as the accumulation of all of one's competences. People who live in "rich" learning environments have a significant intelligence advantage over people who grow up in less stimulating environments. Experiential intelligence can be increased with time.
- c) Reflective intelligence. This refers to one's broad-based strategies for attacking problems, for learning, and for approaching intellectually challenging tasks. It includes attitudes that support persistence, systemization, and imagination. It includes self-monitoring and self-management. The habits of mind included under reflexive intelligence can be learned and improved. Metacognition and other approaches to reflecting about one's cognitive processes can help.

7. Emotional intelligence

The very idea of Emotional Intelligence is to learn how to understand and control our emotions. It also includes how information about one's own feelings can be used to





develop a person and solve their emotional problems. Psychologist Daniel Goleman considers that Emotional Intelligence consists of 4 factors that indicate whether a person could succeed in life. They are:

- Self-awareness Self-awareness means understanding your own emotions and what has caused them.
- Control over emotions It is to be able to have power over our own emotions and to know when we can express them and when not.
- Self-motivation Self-motivation is related to the fulfilment of tasks. How
 we are able to motivate ourselves to do what we have to.
- Empathy Empathy is the understanding of others' feelings. This is important for the overall communication between people.

8. Social intelligence

Another line of development in the field of intelligence stems from the research in the field of intelligence across cultures. Different cultures view intelligence differently and another development in the field of intelligence is related to how it is seen in some parts of Asia and Africa, where the most important factor is cultural understanding. According to APA "Eastern cultures see it as a way for members of a community to recognize contradiction and complexity and to play their social roles successfully". 44

Social intelligence is our ability to understand and remember the multiple interactions between people around us. Theory suggests that it started to develop because of how humans live in large groups and formed over time by the need to be able to remember and distinguish different interactions. It is also believed to be connected to the size of our brains as during the observed historical periods when people were developing there was an increase in the size of the brain. This idea was developed by Steven Mithen to explain the growth itself and how we were able to form more intricate societies than other species on the planet.

Human social interactions also developed with the way people communicate, namely the development of language. It is the single most complicated part of human communication and it would have its greatest development between 600 000 and 200 000 years BC, when it is believed the human brain to have reached its fully developed size we see today.

⁴⁴ From the American Psychology Association





With time the need and use for what we see as social intelligence has become ever more prevalent with humans also having to occupy themselves with knowledge such as romance, politics, friend and family relations etc. These complex social interactions are helped develop people's brains and enabled us to build the civilization we have today.

According to the work of David Perkins, intelligence can be developed in people. He argued that the best way to do it is during a child's developmental stages while in school. He chose this specific period because he also believed that social interaction helps us develop ourselves too. An important thing to note is that he believed skills are insufficient and that through studying and social interaction one may develop his intelligence the most.

9. IQ tests and their creation

The initial work on the way to be able to measure how capable people were was in France at the beginning of the 20th century, with the idea of having a way to see how developed a child was and because of that the first tests were not applicable to adults. The first published test was the Binet-Simon (1905) test, developed by Alfred Binet, Théodore Simon and Victor Henri. It was focused on verbal abilities with the aim of identifying retardation in school students in France. For example, a test would measure whether a six-year-old was as developed as he should be, the measurement being either he is as he should be or he is up or above from the scale. The problem arose when this test was applied to someone who is twenty-two and a thirty-year-old. The testing method was not made with adults in mind, so it could not give valid results.

From the initial tests also stemmed the first IQ tests as a means to measure intelligence in a reliable way in children, while also involving as little outside interference such as knowledge in different fields. The psychologist William Stern created IQ tests, which were developed as a measurement of one's intelligence by solving logic related tasks. The quotient that was evaluated was not an idea of how developed a child was, but more so for the general work of one's brain and it is believed that through the test an estimate of how intelligent someone is could be made. The test itself was made of logical tasks that require the sequencing of various figures. This was made with the idea that the test is a general one and accounts for how abstract the measurement of intelligence is. The test did not include any tasks based on science as not to discriminate people in terms of their education. The final results of the test would be a numerical value that represents how "intelligent" someone is. The median of the result from an IQ test is 100 with a standard deviation of +/- 15, meaning that two-thirds of the world's

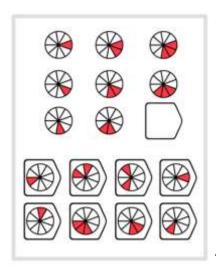




population would fall between 85-115 points, while only 2.5% of the population score above 130 and another 2.5% score below 85.

Another controversial topic that was tried to be avoided with the test was the notion of hereditary intelligence, which is a widely debated topic in the field of psychology. As of now there is not solid data to back up the existence of such a thing, but at the time of the creation of the IQ tests it was a specific idea that this be avoided fully, even though the tests themselves have been used in experiments on whether there was such a thing.

Figure 4 | Raven matrix test



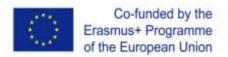
Above is an example of the Raven Matrix test, which is what the most widely used IQ tests look like. The last figure is to be put in by the person being tested, with there being given multiple options for an answer, just like in any other test.

Along with the global measurement of IQ we have the measurement of SQ (social quotient). It is used to measure how developed someone's social intelligence is. The problem is that measuring the SQ is even more complicated. One of the tests that tries to measure it is the George Washington University Social Intelligence Test. The test itself is composed of a few key components, which are:

information contained therein.

- Observation of human behaviour:
- Judgement in social situations;
- Recognition of the mental state of the speaker;

⁴⁵ https://iq-research.info





- Memory for names & faces;
- Sense of humour.

As can be seen, the test is looking at basic functions performed in our society. The grading works the same way as in the IQ test, for example individuals with SQ of 130 are very likely to be excellent at jobs which require extensive interaction and communication with multiple people.

II. Sex⁴⁶ similarities and differences: the contribution of science

1. Overview

The aim of this section is to synthesize the "state of science" regarding to the study of brain capacities in men and women. We will focus on studies developed until now that present evidence of these abilities, as well as similarities and possible gender differences. It intends to describe different results found in literature on these human capacities.

The first living beings were asexual (a matter of adaptability to environment), and in a given moment of biological evolution, sexual differentiation became a reality. The most common in the animal kingdom is the existence of two sexes (female and male). In addition to the biological basis, *homo sapiens* has a diversity of other factors (i.e. biochemistry, psychosocial, behavioural, cultural, etc.) that interfere in terms of gender construction, which is why we should also consider a third gender identity - intersex, which some countries already adopt (i.e. Australia, Germany, Canada). This paper will focus on the classical gender dichotomy - male/female.

Roughly, it appears there are two major hypotheses in the literature: 1) gender differences hypothesis; and 2) gender similarities hypothesis. The first hypothesis has been more popular in media terms and the population in general, having in terms of more classical scientific studies a strong adherence. The famous book by John Gray's (1992) "Men Are from Mars, Women from Venus", which became a bestseller selling millions of copies and being translated into dozens of languages, is a clear evidence of the diffusion and popularity of this hypothesis, as well like many other manifestations, scientific, artistic, philosophical, political, religious and social. The second hypothesis (more recent), argues that women and men are essentially similar in terms of brain capacities (not having as much popularity, but assuming increasing scientific strength).



⁴⁶ The sex and gender distinction is not universal. In ordinary speech, *sex* and *gender* are often used interchangeably. Among scientists, the term *sex differences* as typically applied to sexually dimorphic traits.



Jane Hyde (2005) conducted a study of 46 meta-analyses on this topic and the results analysed seem to support the hypothesis that we are essentially similar, with differences of relevance according to the age or the context in which these variables are studied. Although more recent studies increasingly support this hypothesis, some of the more classic references in psychological science already advocated it. Thorndike (1914) argued that gender differences were too small, in comparison to the variance that existed within each gender, to be considered important. Hollingworth (1918) reviewing the then-existing studies on gender differences in mental traits found little evidence to support the hypothesis of gender differences.

Scientific studies on this issue have been consecutively dropping many popular beliefs about the differences between women and men such as: "Women are more social, more suggestible, with less self-esteem, less motivated for success, better at learning simple tasks and worse in higher cognitive processes" (Maccoby & Jacklin's, 1974). The same authors concluded that there was only evidence of differences in four areas: verbal, spatial, mathematical, and aggressive skills.

In 1990, Shibley Hyde and his colleagues presented a meta-analysis with about 100 different studies in the field of mathematics (from 1967 to 1987), with more than 3 million participants, with no overall evidence of significant differences. These results showed a slight female supremacy in computer skills and the boys' slight superiority in solving problems, but both revealed equal understanding of mathematical concepts, knocking over the idea that existed of male superiority in this competence. According to the studies differences were more in the processes that men and women used in a certain mathematical skill than in the skill itself (eg. women used more verbal processes for math skills and men visual-spatial processes). These researchers found for verbal skills, a minor feminine advantage, somehow shaken by the widely held belief that women were unequivocally better at verbal ability. In addition, no evidence of significant differences was found in the various components of verbal processing. In half of the studies reviewed by these authors gender differences are very small and in one-third almost non-existent.

Elizabeth Spelke and collaborators (2005), analysed 111 studies and concluded that the ability in science and mathematics has a genetic basis in the cognitive system that starts at an early age, but even so, studies suggest that in global terms, men and women have an equivalent skill in terms of science and mathematics. Despite this equality of skills between men and women, the fact that there are more men with scientific and mathematical careers leads to this that the belief of male superiority persists. In 2007, Diane Halpern and colleagues (Hyde included) published a statement on the difference



between men and women regarding STEM differences (Scientific, Technology, Engineer and Mathematics), which has become quite consensual. The issue of differentiation between men and women on the cognitive abilities follows a bit the classic discussion of innate versus acquired hypothesis (Nature or Nurture). We now know that the biological component is only part of the equation, so researchers are consolidating the thesis that early learning, educational policies and the culture in which the individuals develop play a crucial role in the success in terms of STEM skills.

In 2008, Hyde and colleagues reported that children in grades 2 to 11 do not show differences in mathematics. Hyde and Janet Mertz (2009), while reporting that boys appear more at the upper levels of the evaluative scales of mathematical skills, the gender gap has been increasingly blurred over time, even suggesting that this difference is due largely to cultural and contextual issues, as the difference diminishes in countries with greater gender equality.

Scientific research suggests that the differences or perceived differences in cognitive abilities between men and women are more likely to be explained by social rather than biological factors. The vocational choices of boys and girls seem to be better explained by the influence of social expectations of gender, which have considerable power in terms of career definition in the various stages of schooling. A study of a large diverse sample (Morris, 2016) found that there were large sex differences in work-related interests and that these differences are likely to persist. These findings suggest that we will continue to experience differing educational and career outcomes, because interests predict occupational choices.

Steven Spencer and colleagues (1999) studied subjects with a strong history in terms of mathematical skills and found that simply telling women that studies show differences between males and females in mathematics (without saying in what sense) interferes negatively with their performance. Studies of this type have hypothesized that the few differences that exist between men and women are more emotional than in terms of cognitive ability. Ganley and Vasilyeva (2014) have suggested training women in anxiety management techniques and strategies so that their potential is not so affected in terms of success in test results. From the practical point of view, it is important that at an early age, boys and girls should be trained in problem solving and computer skills, and there may be some probability that the more classic tests that evaluate cognitive abilities favour the masculine gender more, which without doubt is too costly from an individual and social point of view.



2. Contributions from neuroscience research

For some, the lens focuses on human behaviour, for others, sex differences are viewed at the cellular level. Some scientists argue that sex differences in the brain are real (Cahill, 2006), whereas others argue that much of the "science" is actually a long-standing bias that has stepped in to replace objectivity (Rippon, Jordan-Young, Kaiser & Fine, 2014).

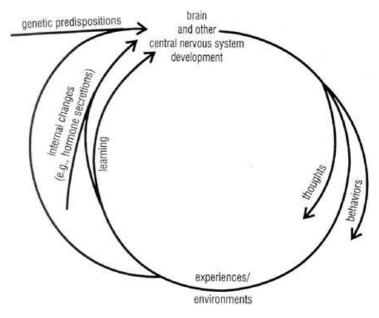
The crucial point is not to argue that there are no structural/functional brain differences between the sexes, but the fact that neural characteristics are not so different in the sexes. The existence of two distinct forms (masculine/feminine) is not an accurate way to characterize sex/gender differences. Taxonomic methods to analyse the latent structure of gender, have recently concluded that female's and male's psychological attributes mostly differ in ways that are continuous rather than categorical (Reis & Carothers, 2014). Distinctive female/male brain circuitry is challenged by new models of neurodevelopment, with reciprocal influences of biology and environment in brain structure and function. The masculine and feminine result of a complex developmental process involving reciprocally influential interactions between genes, brain, social experience, and cultural context, but in the essential, cognitive abilities have more similarities than differences.

In a recent study (Daseking, Petermann & Waldmann, 2017) identify sex differences in cognitive abilities: women scored lower in all indices of WAIS-IV and subtests (with the exception of the Processing Speed Index). Regardless this result, these authors explain that, besides biological factors, environmental factors (i.e. parental care, education, psychosocial variables), as defined by the highest attained education level, explain far more the variance in cognitive abilities than sex. This study revives the discussion whether or not testing cognitive abilities must rely on gender specific norm tables. Are we facing bias or a genuine effect or the interaction of both? Halpern and LaMay (2000) presented a biopsychosocial model for better understanding of these issues:

"A psych biosocial model is preferable over a purely biological or purely environmental model because it allows for multiple processes to operate simultaneously, with environmental inputs altering the biological bases for cognition; which in turn changes the nature of what the individual selects from the environment; which further changes biology, attitudes, and the way individuals make choices." p.241



Figure 5 | A Biopsychosocial model to sex differences



Source: Halpern, 2012

Although sex differences were not found in general intelligence (Hines, 2011), differences were found in specific abilities, like visual-spatial and in verbal abilities (Halpern, 2012). Another study (Makel, Wai, Peairs, & Putallaz, 2016), indicates that ratios in the best 5% of math ability students have shrunk in the last two decades, but still favouring males and remained stable in the verbal domain (favouring females).

The consistent evidence that males and females are basically similar can reduce misunderstanding and different treatment. Even where there are patterns of cognitive differences between males and females, differences are not deficiencies. Even when differences are found, we conclude that they are mutable, because biological and environmental influences can change in the future (Halpern, 2005).

In summary, the most credible scientific studies on cognitive abilities in men and women seem to state that, we are more similar than different. When there are differences, they are in few specific skills, with tenuous differences and with explanations more nurture than nature. Paradoxically, the educational and professional reality of men and women does not follow this pattern. Social innovation implies the commitment to equity and in this sense, it is crucial to know the reality of each context and from there, establish visionary goals of changing the world (for better and different). This is the purpose of GeNeus.



3. The future of the labour market: skills and employer's expectations

This section is based on recent research to provide a brief overview of future employment trends and associated skills requirements. The challenges that the labour market is already facing are significant, and are included in bigger changes like globalisation, economic trends, demographic trends, artificial intelligence, migration, science and technology and environmental change. The labour market confronts, in this macro context of flexibility and insecurity, with changes in jobs and career.

According to the European Commission (2017) some of the biggest changes are: i) increasing jobs in the service sector; ii) moving from one job for life to various career jobs "European worker may have gone from having a job for life to having up to 10 jobs in a career" (p. 17); iii) increasing telework; iv) European mobility of workers; v) more flexible forms of working. In terms of skills required for workers in the future, provision is made for a cross-disciplinary competences and creative skills (European Commission, 2017, p.18). New jobs are also expected, in fact, according to the World Economic Forum (2016) "65% of children entering primary school today will ultimately end up working in completely new job types that don't yet exist" (p. 3).

In 2016, World Economic Forum has presented a report, which explores the future of jobs and the pace of change to the global employment landscape up until the year 2020, according to some of the world's largest employers.

Table 30 | Definitions of 10 top skills in 2020

SKILLS	DEFINITION
1. Complex Problem	"Developed capacities used to solve novel, ill-defined problems in
Solving	complex, real-world settings"
2. Critical Thinking	"Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to
2. Chilical Thirtiking	problems"
3. Creativity	"The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem"
4. People Management	"Motivating, developing and directing people as they work, identifying the best people for the job"
5. Coordinating with Others	"Adjusting actions in relation to others' actions"
6. Emotional Intelligence	"Being aware of others' reactions and understanding why they react as they do"
7. Judgment and Decision	"Considering the relative costs and benefits of potential actions to
Making	choose the most appropriate one"
8. Service Orientation	"Actively looking for ways to help people"
9. Negotiation	"Bringing others together and trying to reconcile differences"



10. Cognitive Flexibility

"The ability to generate or use different sets of rules for combining or grouping things in different ways"

Source: Definition of core work-related skills, based on the O*NET Content Model (2016) World Economic Forum, pp.52-53

In this report, the top 10 skills required for workers, as defined in Table 4, are: 1. Complex Problem Solving; 2. Critical Thinking; 3. Creativity; 4. People Management; 5. Coordinating with Others; 6. Emotional Intelligence; 7. Judgment and Decision Making; 8. Service Orientation; 9. Negotiation; 10. Cognitive Flexibility. Comparing to 2015 results, Critical Thinking and Creativity are upper in the ranking of skills and the most valued competence still is Complex Problem Solving.

The New Skills Agenda for Europe (European Commission, 2016) calls on Member States to improve the quality of skills and their relevance for the labour market. The need of improving skills such as reading and writing, numeracy and digital skills and entrepreneurial mind-set are highly documented. Concerning promoting transversal skills and finding ways to better anticipate the labour market needs, the European Commission presents data that "40% of European employers report that they cannot find people with the right skills to grow and innovate". According to the recent proposal European Reference Framework of Key Competences for Lifelong Learning (European Commission, 2018) the key skills are: i) Literacy Competence; ii) Languages Competence; iii) Science, Technological, Engineering and Mathematical Competence; iv) Digital Competence; v) Personal, Social and Learning Competence; vi) Civic Competence; vii) Entrepreneurship Competence; and viii) Cultural Awareness and Expression Competence. The different national Education and Training Systems must be able to equip people with these competences.



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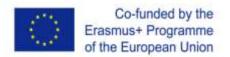
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Appendix 1 Test to select a candidate as a department responsible for the development cooperation

PARTS:

- 1. ENGLISH
- 2. ASSESSMENT TECHNICAL KNOWLEDGE
- 3. INTERVIEW -

Total Duration Parts 1 and 2: 1 hour / 1 hour and 15 minutes

Description of each part:

1. ENGLISH

In the first place, the interviewee has to write an email to a fictitious partner in 20/30 minutes with the following points:

- presentation;
- communication that the project "Drinking water in Kiambu, Kenya" has been approved;
- mention that the project has to be reformulated;
- proposal to eliminate R3 (Improved water supply in the rural community of Kiambu, Kenya) of the ML (logical framework), with relative budget expenditures, to adjust the project to the subsidized amount;
- a new ML (logical framework), schedule and budget is requested based on the modifications made.
- a period of time is determined.
- email closure.

The outline of the email is indicative, the test does not consist of a simple translation of the points listed.

2. ASSESSMENT of TECHNICAL KNOWLEDGE





Indicative duration of the test 30/40 minutes.

The FADE Foundation in Cote d'Ivoire has executed in 2016 the project "DRINKING WATER SUPPLY FOR THE DEVELOPMENT OF RURAL AREAS OF THE SOUTHWEST OF COAST OF MARFIL". A project whose main objective was to guarantee access to drinking water, with the excavation and construction of a well with an electric pump that works with solar energy.

This company also has experience in water supply and training on hygiene and sanitation in several projects executed in Cameroon (2014-2016).

Now the local partner of Côte d'Ivoire asks us to formulate a new letrinization project (sanitation) since the peri-urban area of the city of Abidjan suffers diseases related to water pollution and the lack of a drainage system. More than 90% of the population does not have access to a basic sanitation system. The most frequent diseases are typhoid fever, hepatitis, malaria.

With this information you have to build a logical mark (ML) with 1 OG, 1 OE, at least 2 Results (no more than 4), and activities divided by results.

Work in the logical framework (ML) in the template that we provide

ANNEXES

1. LAST PROJECT IN IVORY COAST

DRINKING WATER SUPPLY FOR THE DEVELOPMENT OF RURAL AREAS OF THE SOUTHWEST OF IVORY COAST

SECTOR COOPERATION	Water and sanitation
WHERE	Bas Sassandra (south of the Republic of Côte d'Ivoire). Sub-prefecture of Grand Béréby. Village of Roc - Ivory Coast
WITH WHOM	FADE Foundation / Asociation Action pour le Développement (AAD)





WHEN

May 2016 - December 2016 (7 months)

WHY:

Guaranteeing access to drinking water is one of the challenges of the government of the Ivory Coast, a country in which 4 million people do not have access to drinking water. However, there are no other organisations working in the same geographical area or on the same group of beneficiaries. At the origin of the project is the fact that timely access to potable water is the priority of the population.

The project is part of a larger plan that the local partner, AAD, is executing at the request of the populations and the legal and traditional authorities of the area. AAD has carried out similar actions in the towns of Mani, in 2013, and Manaboué, in 2012.

The most frequent pathologies are:

- malaria
- · diarrheas, especially children's
- parasitosis
- anemias derived from malaria and parasitosis
- ENT infections
- pulmonary and cutaneous infections due to Staphylococcus aureus
- The HIV AIDS virus affects 5% of the population.

WHAT DO WE DO:

The project, co-financed by the City of Cartagena, aims to



information contained therein.



improve the living conditions of the inhabitants of the rural areas of the Ivory Coast.

The project will reduce the rates of diseases related to the use of contaminated water and will increase the quality of life of the beneficiaries, allowing them to invest time in their training.

The project will especially improve the quality of life and the empowerment of women and girls, who are responsible for supplying households with water.

FOR WHOM:

Direct beneficiaries: 1,500 people (55% women and girls) living in extreme poverty, with little or non economic resources, and many educational deficiencies.

2.- MODEL OF LOGICAL FRAME MATRIX

- Interview:
 - If they have a standard procedure: YES NO
 - What questions do you ask? Please, indicate the most significant ones for you.

3. INTERVIEW

Total duration of the 3 blocks: 1h and 30/2 hours It could be done in 2 hours, in person or for example by Skype, or in two sessions: a first session for blocks one and two, based on this first session a pre-selection could be made and the second session, the part of the "interview-values" would be only for the preselected

Description

persons.





3. INTERVIEW - VALUES

Finally, an interview about the candidate's personality and values would be interesting.

This interview is best to be done by management staff.

This interview can be free (without outline) or specific issues can be raised, such as:

- Tell me about the values of this company. What value you feel most yours.
- Opinion on the SDGs and their implementation
- Opinion on local partners and their work, their level of autonomy, confidence
- Globalization / or the refugee crisis.
- Diseases in impoverished countries, MSF and HIV
- What do you think of the emergency aid?

(These are examples, the interview could focus on one or a couple of these topics).

This last interview would not be so much to assess the level of preparation of the candidate, but rather to assess their level of sensitivity, empathy and their affinity with the values of the entity.



Appendix 2 PERSONAL INTERVIEW

Fill the application:

Explain the reason for the interview. Explain that it is about making a selection to participate in formal Training. Explain that the training action is included in the Training Plan, the free course, the access requirements, the schedule of execution, and other specific information.

Name:La			-	
Date of birth:	Age:			
Are you unemployed:YES	NO			
Have you got a professional c	ard: YES	NO		
Have you got a Certificate of F	Professionalism (le	evel 2 or 3): YE	ES NO	
Have you got a Vocational Tra	aining Title: YES	NO)	
Have you got a University Deg	gree: YES	NO		
Have you got an ESO Certific	ate:YES	NO		
Have you got previous knowl actions:YES NO	edge or experien	ce related to t	he contents of the t	raining
In case the answer to the previous of knowledge you had:	nave or what p	orevious wor	•	
Why you are interested in part	ticipating in this co	ourse:		
If you are selected, do you a professional internships in cor	•	_	sessions and to ca NO	rry out

Date and signature





Agreement Number: 2017-1-AT01_KA202-035051

APPENDIX 3 Summary for Part A - Target groups, Main research results

Specifics per target group:

SME target group of GeNeus⁴⁷ - Focus the research is both on selection of candidates for a job or for training (when SMEs offer training services).

Public Administration target group of GeNeus⁴⁸ - Focus of the research is on selection of candidates for training, consultancy or other services, provided by the public administration.

PSPE (Post Secondary Professional Education) target group of GeNeus⁴⁹ - Focus of the research is on selection of candidates for education by the PSPE organisations and if considered relevant by the PSPE organisations also on selection of job candidates.

I. Results from Austria

Competence	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Professional	6/6	2/2	1/1	
Academic	5/6	2/2	1/1	
Personal	6/6	2/2	1/1	

Types of personal competences	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Communication	4/6	2/2	1/1	
Teamwork	4/6	2/2	1/1	
Dealing with stress	1/6		1/1	

⁴⁷ SMEs: consultancies, counseling services, social services, human resources departments, assessment centers, VET providers; decision makers in these organizations

⁴⁹ Post Secondary Professional Education: post secondary education institutes; institutions doing testings for educational orientation; decision makers in these organizations



⁴⁸ Public Administration: public employment services, consultancies, counseling services, social services carrying out employment related tasks; decision makers in these organizations





Intelligence	Number of entities that consider it				
	SMEs	PAs	PSPEs		
Mathematic	0/6	2/2	1/1		
Verbal	3/6	2/2	1/1		
Memory	0/6	2/2	1/1		
Visual orientation	1/6	2/2			
Concentration	0/6	2/2	1/1		
Creativity	1/6				
Values	1/6				

Emotional and Social Intelligence	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Self-knowledge	1/6	2/2	0/1	
Emotional control	1/6	2/2	0/1	
Self motivation	1/6	2/2	0/1	
Visual orientation	0/6	2/2	0/1	
Concentration	0/6		1/1	
Positive attitude towards life and self responsibility	0/6	1/2		
Holistic thinking and acting	0/6	1/2		
Service competence	0/6	1/2		
Solution orientation	0/6	1/2		
Relation management	0/6	1/2		

Personality	Number of entities that consider it			
	SMEs PAS PSPEs			
Self-esteem	0/6	0/2	0/1	
Extraversion	0/6	0/2	0/1	
Proactivity	0/6	0/2	0/1	





Other: please list them on the next lines		

Other	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Other: please list them on the next lines	0/6			

2. How they evaluate it and select candidates.

What methods they use?	SM	Es	PAs		PSPE	5
	Number of entities that consider it	Weight of the method in the final decision	Number of entities that consider it	Weight of the method in the final decision	Number of entities that consider it	Weight of the method in the final decision
1.Tests – standardised	0/6	0%	1/2	preselection	1/1 (some areas)	Preselection
2.Tests – not standardised (own tests)	0/6	0%	1/2		0/1	
3.Interview	6/6	100%	2/2	Final decision	1/1	Final decision
a.Do they have a standard procedure for interviews?	3/6	100%	2/2		yes	100%
4.Other methods:						
Assessment Centre for CEO	1/6	100%				



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Internships/Trials	3/6	50%		

What they measure with tests?	Number of entities	Number of entities that consider it			
	SMEs	PAs	PSPEs		
1. Intelligence	0/6	2/2	1/1		
Academic knowledge	0/6		0/1		
Professional knowledge	0/6				
Emotional and social intelligence	0/6	2/2			
5. Personality	0/6	2/2			
6. Other: please list on the next lines			Mathematical and German skills		

3. Needs

Please summarize main needs for the target groups!	SMEs	PAs	PSPEs
Needs regarding tests in particular	0/6	0/2	0/1
Needs regarding evaluation process in general	1/6	0/2	0/1
Other: please list on the next lines			

4. Gender specifics.

Gender specific difference in performance testing	SMEs	PAs	PSPEs
In favour of women	0/6	0/2	0/1
2. In favour of men	0/6	0/2	0/1
3. Neutral	0/6	0/2	0/1





Results from Bulgaria

Competence	Number of entities that consider it			
	SMEs	PSPEs		
Professional	6/7	1/1	2/2	
Academic	5/7	1/1	2/2	
Personal	7/7	0/1	1/2	

Types of personal competences	Number of entities that consider it		
	SMEs	PAs	PSPEs
Communication	4/7	1/1	2/2
Teamwork	4/7	0/1	0/2
Dealing with stress	1/7	0/1	0/2

Intelligence	Number of entities that consider it				
	SMEs	PAs	PSPEs		
Mathematic	3/7	0/1	0/2		
Verbal	5/7	1/1	2/2		
Memory	3/7	0/1	0/2		
Visual orientation	2/7	0/1	0/2		
Concentration	3/7	0/1	0/2		
Creativity	2/7	0/1	0/2		
Values	1/7	0/1	0/2		

Emotional and Social Intelligence	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Self-knowledge	1/7	0/1	1/2	
Emotional control	1/7	0/1	0/2	
Self motivation	3/7	1/1	1/2	





Visual orientation	1/7	0/1	0/2
Concentration	3/7	0/1	1/2
Positive attitude towards life and self responsibility	0/7	0/1	0/2
Holistic thinking and acting	1/7	0/1	0/2
Service competence	1/7	1/1	2/2
Solution orientation	2/7	0/1	0/2
Relation management	3/7	0/1	2/2

Personality	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Self-esteem	0/7	0/1	0/2	
Extraversion	0/7	0/1	0/2	
Proactivity	0/7	0/1	0/2	
Other: please list them on the next lines				

Other	Number of entities that consider it				
	SMEs PAs PSPEs				
Other: please list them on the next lines					

2. How they evaluate it and select candidates.

What methods they use?	SMEs	3	PAs		PSPE	is
	Number of entities that consider it	Weight of the method in the final decision	Number of entities that consider it	Weight of the method in the final decision		Weight of the method in the final decision





1.Tests – standardised	1/7	50%	0/1	2/2
2.Tests – not standardised (own tests)	1/7	20%	0/1	0/2
3.Interview	7/7	100%	1/1	1/2
a.Do they have a standard procedure for interviews?	5/7	100%	1/1	yes
4.Other methods:				
Assessment Centre for CEO	1/7	100%		
Internships/Trials	3/7	50%		

What they measure with tests?	Number of entities that consider it			
	SMEs	PAs	PSPEs	
1. Intelligence	2/7	0/1	2/2	
Academic knowledge	2/7	0/1	2/2	
Professional knowledge	2/7	0/1	2/2	
Emotional and social intelligence	2/7	0/1	2/2	
5. Personality	2/7	0/1	0/2	
Other: please list on the next lines	Language skills, math knowledge	0/1	Language skills, math knowledge	

3. Needs

Please summarize main needs for	CME	DAo	DODE
the target groups!	SMEs	PAs	PSPES





1.Needs regarding tests in particular	3/7	0/1	2/2
2.Needs regarding evaluation process in general	2/7	0/1	2/2
3.Other: please list on the next lines			

4. Gender specifics.

Gender specific difference in	SMEs	PAs	PSPEs
performance testing	SIVIES	FAS	FSFES
In favour of women	0/7	0/1	0/2
2. In favour of men	0/7	0/1	0/2
3. Neutral	7/7	0/1	0/2

III. Results from Italy

Competence	Number of entities that	Number of entities that consider it			
	SMEs PAs PSPEs				
Professional	2/5	1/1	2/3		
Academic	2/5				
Personal	4/5	1/1	2/3		

Types of personal competences	Number of entities that consider it				
	SMEs	PAs	PSPEs		
Communication			1/3		
Teamwork			2/3		
Dealing with stress			1/3		
Other: please list them on the next					
lines					





Intelligence	Number of entities th	nat consider it	
	SMEs	PAs	PSPEs
Mathematic	1/5		2/3
Verbal			
Memory			
Visual orientation			
Concentration	3/5		2/3
Other: please list them on the next			
lines			
Expression capabilities	2/5		2/3

Emotional and Social Intelligence	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Self-knowledge				
Emotional control				
Self-motivation	2/5		1/3	
Visual orientation				
Concentration			1/3	
Other: please list them on the next lines				
Eager to learn	1/5			
Emotional intelligence in general	1/5			

Personality	Number of entities that consider it				
	SMEs PAs PSPEs				
Self-esteem					
Extraversion					
Proactivity					
Other: please list them on the					



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next lines			
Personality in general	3/5	1/1	2/3

Other	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Other: please list them on the next lines				
Organisational and communication capabilities			2/3	
IT skills			1/3	
Specializations			1/3	
Capacity to handle criticism	1/5			
Research and analysis capabilities			1/3	

2. How they evaluate it and select candidates.

What methods they use?	SMEs		PAs		PSPEs	
	Number of	Weight of the	Number of	Weight of the	Number of	Weight of the
	entities that	method in the	entities that	method in the	entities that	method in the
	consider it	final decision	consider it	final decision	consider it	final decision
1.Tests – standardised	4/5		1/1	50%		
2.Tests – not standardised (own tests)						
3.Interviews	4/5		1/1		3/3	
a.Do they have a standard procedure for interviews?	1/5					
4.Other methods:						



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please list on the next				
lines				
Problem solving, decision making, technical and relational questions.		1/1		
Simulations and cases analysis	1/5			

What they measure with tests?	Number of entities	that consider it	
	SMEs	PAs	PSPEs
1. Intelligence			
Academic knowledge	2/5	1/1	2/3
Professional knowledge	2/5	1/1	2/3
Emotional and social intelligence	1/5	1/1	
5. Personality	1/5	1/1	
6. Other: please list on the next lines			
Personality tests: MMPI, Rorschach and Wais testings		1/1	
Flexibility and rigidity		1/1	
Competencies			1/3
Ability to work independently	1/5		

3. Needs

Please summarize main needs for the target groups!	SMEs	PAs	PSPEs
Needs regarding tests in particular	Testing procedures could be improved		
2. Needs regarding evaluation		They have a	





process in general	comparison with statistical and measurable data	
Other: please list on the next lines		

4. Gender specifics.

Gender specific difference in performance testing	SMEs	PAs	PSPEs
 In favour of women 			
2. In favour of men			
3. Neutral	3/5*	1/1	2/3

*For 1 interviewed candidate, females' performances are in general better than males' performances, because they are able to cope much more with the stress for selections (maybe because of their natural propensity towards stress;

Main **problems** in the selection processes:

> For SMEs

The candidate's anxiety for the interview when it becomes more technical then just focused on general knowledge; Lack of motivation of some candidates:

Limited number of technical resources in the labour market of Palermo and difficulty in getting candidates involved. Limited availability of specific professional competencies;

For PAs:

The anxiety of the subject for its performance during the assessment;

For PSPEs:

Candidates are not used to face structured interviews in which personal and motivational aspects are integrated with professional and disciplinary aspects; Inexperience;



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Main **suggestions** for the selection processes:

For **PAs**: It would be better to evaluate the employees periodically in order to assure better performances.

IV. Results from Portugal

Competence	Number of entities that consider it				
	SMEs	PAs	PSPAs		
Professional	5/6	3/3	0/3		
Academic	1/6	3/3	3/3		
Personal	6/6	3/3	2/3		

Types of personal competences	Number of entities that consider it				
	SMEs	PAs	PSPAs		
Communication	6/6	1/3	0/3		
Teamwork	6/6	Not informed	0/3		
Dealing with stress	3/6	Not informed	0/3		
General culture	3/6	1/3	0/3		
Written communication	3/6	1/3	0/3		
Comprehension	3/6	2/3	0/3		
Presentation, self-care	3/6	2/3	0/3		
Vocabulary and mode of expression	3/6	1/3	0/3		
Interest for the function and Motivation	6/6	2/3	2/3		

Intelligence	Number of entities that consider it				
	SMEs	PAs	PSPAs		
Mathematic	1/6	1/3	0/3		
Verbal	1/6	1/3	0/3		
Memory	1/6	1/3	0/3		





Visual orientation	1/6	0/3	0/3
Concentration	1/6	0/3	0/3
General reasoning	1/6	2/3	0/3

Emotional and Social Intelligence	Number of entities that consider it				
	SMEs	PAs	PSPAs		
Self-knowledge	4/6	0/3	0/3		
Emotional control	4/6	0/3	0/3		
Self motivation	4/6	2/3	0/3		
Visual orientation	4/6	0/3	0/3		
Concentration	4/6	0/3	0/3		

Personality	Number of entities that consider it				
	SMEs	PAs	PSPAs		
Self-esteem	6/6	1/3	0/3		
Extraversion	6/6	1/3	0/3		
Proactivity	6/6	1/3	0/3		
Organisational capacity	6/6	1/3	0/3		
Interpersonal relationship capacity	6/6	1/3	0/3		

Other	Number of entities that consider it					
	SMEs PAS PSPAs					
Punctuality	Not informed	1/3	0/3			
Availability	6/6 1/3 1/3					

2. How they evaluate it and select candidates.

What methods they use?	SMEs		PAs		PSPAs				
	Number	of	Weight of the	Number	of	Weight of the	Number	of	Weight of the
	entities	that	method in the	entities	that	method in the	entities	that	method in the



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	consider it	final decision	consider it	final decision	consider it	final decision
1.Tests – standardised	1/6	30%	2/3	30%	1/3	80%
2.Tests – not standardised (own tests)	0/6		0/3			
3.Interview	6/6	70%	3/3	70%	1/3	20%
a.Do they have a standard procedure for interviews?	5/6		3/3		0/3	
4.Questionnaire on motivation					1/3	50%
5.English Test	4/6	10%				
6.Role play	3/6	20%				

What they measure with tests?	Number of entities that consider it		
	SMEs	Pas	PSPAs
1.Intelligence	1/6	2/3	0/3
2.Academic knowledge	0/6	0/3	1/3
3.Professional knowledge		2/3	0/3
4.Emotional and social intelligence	0/6	0/3	0/3
5.Personality		1/3	0/3
6.Language skills (English)	4/6		

3. Needs

Please summarize main needs for the target groups!	SMEs	PAs	PSPAs
Needs regarding tests in particular	Adequacy between existing tests and needs of the services Cheaper Tests	Adequacy between existing tests and needs of the services Cheaper Tests	Adequacy between existing tests and needs of the services



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4. Gender specifics.

Gender specific difference in performance testing	SMEs	PAs	PSPAs
In favour of women			
2. In favour of men			
3. Neutral	6/6	3/3	3/3

V. Results from Spain

Competence	Number of entities that	Number of entities that consider it			
	SMEs PAs PSPEs				
Professional	7/7	4/4	5/6		
Academic	7/7	4/4	5/6		
Personal	7/7	4/4	5/6		

Types of personal competences	Number of entities that consider it		
	SMEs	PAs	PSPEs





Communication	2/7		
Teamwork	2/7		
Dealing with stress	1/7		
Other: please list them on the next lines	2/7 Languages, Work experience, Planning, IT	1/4 Attitude	

Intelligence	Number of entities that cons	sider it	
	SMEs	PAs	PSPEs
Mathematic	1/7	1/4	
Verbal	4/7	1/4	3/6
Memory	1/7	1/4	1/6
Visual orientation	1/7		
Concentration	2/7	1/4	2/6
Other: please list them on the next	1/7		
lines	spatial contents, numeric series, logic matrices, effectiveness, error rates, omissions, speed,		

Emotional and Social Intelligence	Number of entities that consider it		
	SMEs	PAs	PSPEs
Self-knowledge	5/7		1/6
Emotional control	1/7	1/4	3/6
Self motivation			
Visual orientation			
Concentration			





Personality	Number of entities th	Number of entities that consider it			
	SMEs	SMEs PAs PSPEs			
Self-esteem	5/7	1/4	2/6		
Extraversion					
Proactivity	1/7				

Other	Number of entities that consider it			
	SMEs	PAs	PSPEs	
Other: please list them on the next		1/4 Complementary	1/6	
lines		academic qualifications.	Behaviour: specific to	
		1/4Suitability to the position,	situations and work	
	training or service. Lif		Adaptation of personal	
		project. Interest in project	circumstances to	
		training participation and in	challenges involved in	
		learning. Timetable	accepting the position	
		availability	(commuting, travelling,	
			timetable	

2. How they evaluate it and select candidates.

What methods they use?	SM	1Es	PAs		PSPEs	
	Number of entities that consider it	Weight of the method in the final decision	Number of entities that consider it	Weight of the method in the final decision	Number of entities that consider it	Weight of the method in the final decision
1.Tests – standardised	3/7	50%			2/6	
2.Tests – not standardised	2/7	50%	3/4	30%	3/6	1/6 40% 2/6 50%





	77	100% Yes: 2/4	70%	5/6 Yes: 3/6	2/6 60% 2/6 50% 2/6 100%
have a standard procedure for interviews? 4.Other 1/4 methods: play please list on the next lines work to	7	Yes: 2/4		Yes: 3/6	
methods: play please list The tra on the next course lines work to					
him/he infinity	plan, draw s for	2/4 Role play and simulation 1/4 Questions during the interview in which they explore possible situations that might arise on the job. The candidate is asked to imagine how they would manage the situations		1/6 Role play and simulation, Social skills and positive attitudes.	1/6 Letters provided by the SEF to interested candidates. 2/6 Group Dynamics and Candidate behaviour during the process.

What they measure with tests?	Number of entities that consider it		
	SMEs	PAs	PSPEs
1. Intelligence	1/7		1/6
Academic knowledge	2/7	2/4	4/6
Professional knowledge	1/7	2/4	
Emotional and social intelligence	1/7		1/6





5.	Personality	1/7	1/6
	Other: please list on the next lines	Residence, creativity	Attitude

3. Needs

Please summarize main needs for the target groups!	SMEs	PAs	PSPEs
1.Needs regarding tests in particular	1/4 Some assessment test for technician positions		
2.Needs regarding evaluation process in general		1/4 Training and better know-how regarding selections test	3/6 Apply the standards of ISO for the assessment and management of people. The higher cost involved is the purchase of the product.
3.Other: please list on the next lines	1/7 To find an adequate profile to the vacancy.1/7 Qualification for some profiles	1/4 Lack of reliable analysis tools, evaluation and management of personal and professional skills.	
	4/7 no needs		3/6 no needs

4. Gender specifics.

Gender specific difference in performance testing	SMEs	PAs	PSPEs
In favour of women			2/6 Differences
2. In favour of men			
3. Neutral	5/7 No differences	4/4 No differences	2/6 No differences
	2/7 No answer		2/6 No answer

