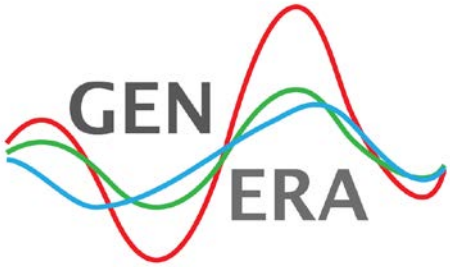

STATISTICAL DATA COLLECTION TEMPLATE

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EXPLANATORY NOTES ON DATA VARIABLES

Demographics Data: sex; date of birth; civil status; country of birth; citizenship; family contribution (children taken in charge or persons); number of children.

- Sex: This variable has a crucial importance to explore imbalance between women and men.
- Date of Birth: The date of birth is important to know the exact age when we analyze data. This is a structural variable useful to generate classes of age with the aim to analyze the career path. For example we can examine how the responsibility in work can increase by age, or how parental leave or career breaks could be related to age.
- Civil Status: The civil status is a structural variable related to the career. Conciliate work and life could be difficult, this variable is important to know if there is discrimination in career progression throughout the different marital status.
- Citizenship: this variable is important to monitor the migration (high skills migration, territorial migration); it could be correlated to the country of degree.
- Family contribution: this variable, in relation with the career path helps understanding the trend and the progression in career.
- Number of Children: the number of children is strictly related with the career path and with its trend.

Variables like “number of children” or “family contribution” have been chosen because they could be an indicator to measure career progression of the women in physics, they can highlight also phenomena related at gender issues.

Education Qualification: Master’s degree, PhD (field, subfield, year, country).

- Master’s degree: this variable is important to know the education qualification.
  - The field of degree and the subfield of degree are crucial aspects about the homogeneity between the master’s degree accomplished and the job.
  - The year or degree is important to investigate the age of researchers and how their level of contract has changed.
  - The country of degree is important to follow the migration paths, the brain drain etc.
- PhD: this variable is important to get the information on number of PhD employed, bearing in mind that is some cases PhD might not be mandatory to get a research position.
  - The year of PhD is important to investigate the age of researchers and how their level of contract has changed.
  - The country of PhD is important is important to follow the migration paths, the brain drain etc

There are differences in the career between woman and men even if the education qualification is the same. Usually men tend to progress faster and better than women. Asses the level and the type of education of researchers could be a good indicator about issues like the leaky pipeline, the sticky floor or the glass ceiling.

Career Path:

- Type of the current contract: this variable is important to get information on the present

position

- Level of the current contract allows the analysis of trends of the career progression
- Field of science of the current contract: allows to analyse the link between education qualification and the present job
- Date of the current contract: to know when the current contract started
- Type of the first contract: to know the type of the contract at the time of the hiring
- Level of the first contract: to know the typology of the hired contract
- Field of science of the first contract: to explore the trend of the homogeneity of field of work
- Date of the first contract: to know the age of the hiring
- Date of the first permanent contract: again related to age
- Types of others contracts: to know the trend of the typology of the contracts
- Level of the others contracts: to get information on the changing typology of contract
- Date of the others contracts: to get information on age variations
- Field of science of the others contracts: to follow the trend of the homogeneity of field of work

The importance to collect information about the different types of contracts is related to the possibility of reconstructing and following the career paths of women scientists taking also into account, if possible, periods of temporary employment.

Work organization: The variables considered focus on the different levels of responsibility and on the structure of work organization. Considering responsibility we identified four main levels.

- Responsibility of Institute/ Structure etc.
- Responsibility project
- Responsibility laboratory
- Teaching

Moreover, the structure of work organization is affected by these three variables:

- Part-time
- Parental leave
- Career breaks

Collecting information on these variables might be useful to detect the correlation between familiar responsibilities and duties and work responsibilities and career levels. This information allows for a measurement of the work/life balance facing career responsibilities and family care duties.
Indicators like parental leave or career breaks can highlight these issues.

Research output:

Main research output has been considered, such as:

- *journal article*
- *conference contribution*
- *chapter in edited books report*
- *thesis/dissertation*
- *book*
- *edited volume*

- *patent/trademark*
- *internet publication*

Getting indicators on these items may be useful to analyse the possible correlations between number of publications, research career levels and parental leaves or career breaks, which may affect the productivity and the career progression.

List of Recommendations

This *Statistical data collection Template* presents a list of gender equality indicators that may be selected by each organization/user. The list is extended but may not be exhaustive, and can be used as a guide.

At the general level each organization should:

- ❖ Collect administrative data already available in Central Administration Offices or Human Resources Department
- ❖ Collect data on Physics research organizations, as classified by EUROSTAT/UNESCO/OECD "Field of Science Classification" (FOS)
- ❖ Gather sex-disaggregated baseline information
- ❖ Assure homogeneity using the variables and labels suggested in the Template.

STATISTICAL DATA COLLECTION TEMPLATE

Name	*Description*	*M=mandatory/O= Optional*	*Availability*	*Multiplicity*	*Example of variables*	*Classifica-tion*	*Note*
Demographics							
Sex	Biologically determined characteristics of men and women	M		no	not known; F; M; not applicable	ISO/IEC 5218	
Date of birth	Date of birth	M		no	dd/mm/yyyy		
Country of Birth	Country of birth	O		no	FR, DE, IT….	ISO 3166	Alpha 2-code is recommend
Citizenship	The status of a person recognized under the custom or law as being a member of a state	O		no	FR, DE, IT….	ISO 3166	Alpha 2-code is recommend
Civil Status	Marital status	O		no	single person, married, widowed person, divorced, legally separeted, ecc	SCL - Marital status, Eurostat	
Number of children	Number of children	O		no	1,2,3		
Family contribution	Financial contribution for children and/or other persons taken in charge	O		no			
Education qualification							

Master's degree	Level 7 – Master's or equivalent level	M		yes	Master of science, Master of physics, Master of sociology...	ISCED	
Field of degree	Broad grouping of high level of degree	M		yes	Natural Sciences; Engineering and technology; Medical and Health sciences; Agricultural Sciences; Social sciences, Humanities	FOS	
Subfield of degree	Sub-Grouping of high level of degree	O		yes	Atomic, molecular and chemical physics, Nuclear physics, Astronomy…	FOS	Use third level classification (3 digit)
Year of degree	The year of the accomplished degree	O		yes	yyyy		
Country of degree	The country of the accomplished degree	O		yes	FR, DE, IT….	ISO 3166	Alpha 2-code is recommend
PhD	Level 8 – Doctoral or equivalent level	M		yes	PhD, DPhil, D.Lit, D.Sc, LL.D, Doctorate	ISCED	
Year of degree	The year of the accomplished degree	O		yes	yyyy		
Country of degree	The country of the accomplished degree	O		yes	FR, DE, IT….	ISO 3166	Alpha 2-code is recommend
Career Path							
CURRENT CONTRACT							

Type	Type of current contract	M		no	fixed term contract, permanent contract..		
Level	Level of career of the current obtained contract	M		no	Level A, level B, level C		
Subfield of science	Specification of subfield of science of the current contract	M		no	Atomic, molecular and chemical physics, Nuclear physics, Astronomy…	FOS	Use third level classification (3 digit)
Start Date	Date of the signed current contract	M		no	dd/mm/yyyy		
End date	Data of the expired current contract	O		no	dd/mm/yyyy		To be compiled only if it is a fixed term contract
FIRST CONTRACT							
Type	Type of the first Contract	O		no	short term contract, long term contract, fixed term contract		To be compiled only if the first contract is different from the current one
Level	level of career of the first obtained contract	M		no	Level A, level B, level C		
Subfield of science	Specification of subfield of science of the first contract	M		no	Atomic, molecular and chemical physics, Nuclear physics, Astronomy…	FOS	Use third level classification (3 digit)

Start Date	Date of the signed first contract	M		no	dd/mm/yyyy		
End date	Data of the expired first contract	M		no	dd/mm/yyyy		
OTHER CONTRACTS							
Type	Type of other contracts	O		yes	short term contract, long term contract, fixed term contract		
Level	Level of career of other contracts	M		no	Level A, level B, level C		
Start Date	Initial date of the signed other contracts	O		no	dd/mm/yyyy		
End date	Date of the expired contract	O		no	dd/mm/yyyy		
Subfield of science	Specification of subfield of science of other contracts	M		yes	Atomic, molecular and chemical physics, Nuclear physics, Astronomy…	FOS	Use third level classification (3 digit)
Work organization							
Responsibility of Institute/ Structure etc.	Institute/department being in charge of	O		yes	Director of institute, Responsible of structure, Managing director, …		If this field is compiled, provide start date and end date of responsibility
start date	The date in which the responsibility of Institute started	M		yes	dd/mm/yyyy		
end date	The date in which the	M		yes	dd/mm/yyyy		

	responsibility of Institute ended						
Responsibility project	Project being in charge of	O		yes	Project manager, responsible of project/ experiment		If this field is compiled, provide start date and end date of responsibility
start date	The date in which the responsibility project started	M		yes	dd/mm/yyyy		
end date	The date in which the responsibility project ended	M		yes	dd/mm/yyyy		
Responsibility laboratory	Laboratory being in charge of	O		yes	Responsible of laboratory, Technical manager		If this field is compiled, provide start date and end date of responsibility
start date	The date in which the responsibility laboratory started	M		yes	dd/mm/yyyy		
end date	The date in which the responsibility laboratory ended	M		yes	dd/mm/yyyy		

Teaching	Type of professorship	O		yes	Professor, Associate professor, Assistant professor, Lecturer		If this field is compiled, provide start date and end date of teaching period/s
start date	The date in which the teaching period started	M		yes	dd/mm/yyyy		
end date	The date in which teaching period ended	M		yes	dd/mm/yyyy		
Part-time	Form of employment with fewer hours of work per week	O		yes	yes/no		If this field is compiled, provide start date and end date of part-time period/s
start date	Initial date of part-time	M		yes	dd/mm/yyyy		
end date	Expiring date of the part-time	M		yes	dd/mm/yyyy		
Parental leave	Period of time that a parent spends away from work to take care of his/her baby	O		yes	yes/no		If this field is compiled, provide start date and end date of parental leave period/s

start date	Initial date of parental leave	M		yes	dd/mm/yyyy		
end date	Expiring date of parental leave	M		yes	dd/mm/yyyy		
Career Breaks	Period of time not spent at work	O		yes	yes/no		If this field is compiled, provide start date and end date of career break period/s
start date	Initial date of career breaks	M		yes	dd/mm/yyyy		
end date	Expiring date of career breaks	M		yes	dd/mm/yyyy		
Research Output							
Journal article	article, review, editorial comment	O		No	1,2,3		
Conference contribution	abstract, poster, oral presentation, conference proceedings	O		No	1,2,3		
Chapter in edited books	entries in edited books, introductions, prefaces	O		No	1,2,3		
Report	working paper, technical report	O		No	1,2,3		
Thesis/Dissertation	doctoral thesis, master thesis	O		No	1,2,3		
Book	book, translation	O		No	1,2,3		

Edited Volume	edited books or volumes, textbooks or encyclopaedias	O		No	1,2,3		
Patent/Trademark	published patent, copyrights, trademarks	O		No	1,2,3		
Internet Publication	scholarly material	O		no	1,2,3		