AARHUS
UNIVERSITY
BUSINESS AND SOCIAL SCIENCES

Developing an Evaluation Framework for Promoting Gender Equality in R&I (EFFORTI) – first insights from an on-going H2020 project

STI Conference
6 - 8 September 2017

EFFORTI

WP3
Objectives and Status
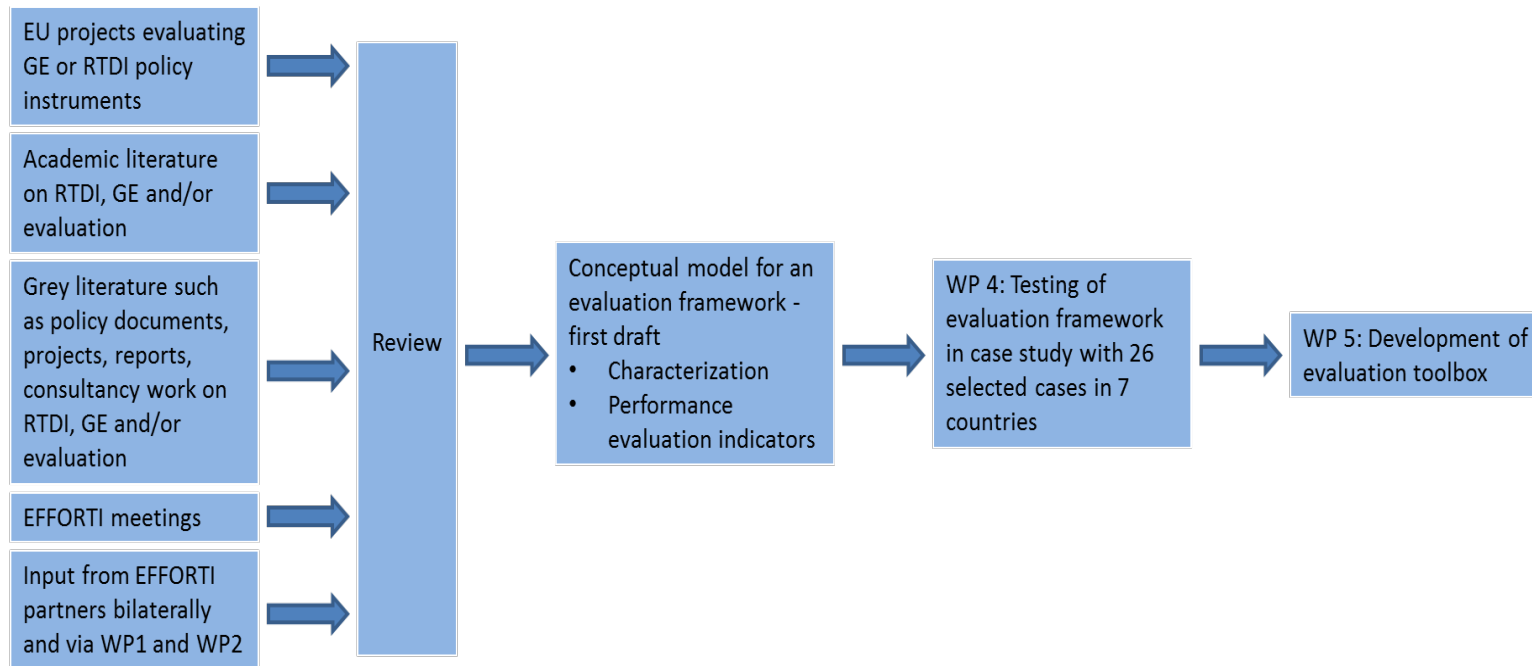
Objectives

- **Provide an initial first draft of a conceptual model of an evaluation framework: Toolbox EFFORTI 1.0.**

- **WP3 is based on the insights gained through WP2 (context mapping and analysis) and will contribute to WP4 (case studies and evaluation framework validation) and WP5 (toolbox development and valorization, Toolbox EFFORTI 2.0).**

Status

- **Literature studies and collection of best practices.**

- **Preparing a tentative conceptual evaluation framework to be tested and refined.**

- **The toolbox will be tested in 26 case studies in seven countries.**

Graphical overview of the process

EU projects evaluating GE or RTDI policy instruments				
Academic literature on RTDI, GE and/or evaluation				
Grey literature such as policy documents, projects, reports, consultancy work on RTDI, GE and/or evaluation	Review	Conceptual model for an evaluation framework - first draft • Characterization • Performance evaluation indicators	WP 4: Testing of evaluation framework in case study with 26 selected cases in 7 countries	WP 5: Development of evaluation toolbox
EFFORTI meetings				
Input from EFFORTI partners bilaterally and via WP1 and WP2				

Category	Dimension	Sub-dimension
1. Personnel	**1.1 Positions**	1.1.1 Increased number of women in academic and other RTDI positions
		1.1.2 Increased number of women in decision-making positions
	1.2 Recruitment capacity	1.2.1 Improved recruitment of talented women
2. Working Conditions	**2.1 Work/Life balance**	2.1.1 Improved compatibility of family and career
	2.2 Job satisfaction	2.2.1 Appropriate respect/recognition for (academic/scientific/leadership) work
		2.2.2 Positive individual job rating
		2.2.3 Overall work climate
		2.2.4 Allocation of workload
	2.3 Competitiveness/Promotion and Career	2.3.1 Transparent, non-biased and flexible promotion/tenure criteria
		2.3.2 Strengthened confidence for promotion and responsible positions / Improved support to progress research career
	2.4 Workplace	2.4.1 Equal workspace/facilities allocation
3. Professional Capabilities	**3.1 Leadership**	3.1.1 Increased confidence and ability of leadership roles
	3.2 Professional achievements	3.2.1 Professional development of work skills (for career success)
		3.2.2 Improvement of network building and use
	3.3 Awareness of/commitment to Gender Equality	3.3.1 Increased Gender awareness
	3.4 Funding to promote GE in terms of female careers	3.4.1 Increased funding to promote GE
4. Structural Features	**4.1 Gender Equality challenges/barriers**	4.1.1 Decrease of GE barriers
	4.2 Organizational/cultural change with regard to GE	4.2.1 Organizational/cultural change with regard to GE
	4.3 Preferential treatment	4.3.1 Equal treatment
	4.4. Funding	4.4.1 Increased funding
5. Research & Innovation/ RRI	**5.1 Innovation & Innovative approaches**	5.1.1 Research priorities and outcomes in terms of GE
		5.1.2 Knowledge about sex and gender incorporated into engineering, innovation processes
	5.2 Responsible Research and Innovation (RRI)	5.2.1 Reduced gender segregation
		5.2.2 Revision of existing organisational arrangements to eliminate barriers impeding women's advancement to top positions and factors inducing women to drop out of science
	5.3 Gender Sensitive Research	5.3.1 GE in research process
		5.3.2 Research quality: A gender dimension/perspective in research and content, in research projects, patents, agreements is integrated
		5.3.3 Contributions to strengthening gender sensitive research

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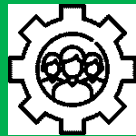
1 PERSONNEL

with regard to research organization, universities, ministries, companies

RESULTS/ POLICY MEASURE STRATEGIES	INDICATORS AT TEAM LEVEL	INDICATORS AT ORGANISATIONAL LEVEL	INDICATORS AT POLICY/ COUNTRY LEVEL
1.1 GENDER EQUALITY DIMENSION: **POSITION**			
STRATEGY 1. More women in R & D STRATEGY 2. More women in leadership positions **1.1.1 Equality in decision-making/Increased number of women in academic and other RTDI positions**	• Composition of academic positions per team (AKKA, LDW, LEAP, NL, Rice, Stanford) • Number of tenured/tenure-track/non-tenured faculty (Toolkit) • Perception of hampering performance due to increased costs of coordination and negotiating between diverse members (UoC A4) • Gendered competency expectations (GenPORT) • Women's participation in paid work (MoRRI)	• Horizontal/vertical segregation in positions (AU) • Relative probability between the ability of men and women reaching a top position (NL) • Period of time spent in academic positions (LEAP) • Cohort/event history analyses of tenure and promotion (Toolkit) • Proportion of doctorates becoming professors within a 12-year period (VINNMER) • Comparison between the proportion of female faculty during the most recent academic year to the	• Relative size of business enterprise in R&D sector (FI) • Models of public involvement in S&T decision making (MoRRI) • Horizontal/vertical gender segregation in occupations and in economic sectors (ECNGD, p.53 ff.) • Distribution of grade A staff across age groups by sex (ECNGD, p.64) • Distribution of staff across gender • Distribution of RFOs across gender • Success rates of men and women applicants to positions • Percentage of research evaluation panels in RFOs that included the

1.2 GENDER EQUALITY DIMENSION: RECRUITMENT CAPACITY

STRATEGY 1. More women in R & D *STRATEGY 2. More women in leadership positions* **1.2.1 Improved recruitment of talented women**	• Number of new hired faculty ([Toolkit](#)) • Negotiation of job offers (concerning salary, workload, office space) ([LEAP](#)) • Reaction on female supporting treatment ([Athena SWAN](#), [ESWN](#))	• Fairness of evaluation (Advance IT) • Guideline for recommendation letters (e.g. content; length; solid recommendation; professional portray) (Advance IT) • Composition of search committees and applicant pool (Advance IT) • Facts about contracts of newly hired faculty (e.g. base salary, funding source, benefits, technical support) ([Toolkit](#)) • Relation between gender composition and success rate of the candidate pool ([Stanford](#)) • Share of gender-balanced recruitment committees at RPOs ([MoRRI](#))	• Openness of labour market for researchers (ECNGD, p.6) • Degre█████████████utonomy (ECNGD, p.6) • Sex differences in international mobility of researchers during PhD/in post-PhD careers (ECNGD, p.63)

2 WORKING CONDITIONS

RESULTS/ POLICY MEASURE STRATEGIES	INDICATORS AT TEAM LEVEL	INDICATORS AT ORGANISATIONAL LEVEL	INDICATORS AT POLICY/ COUNTRY LEVEL
2.1 GENDER EQUALITY DIMENSION: **WORK/LIFE BALANCE**			
STRATEGY 1. More women in R & D *STRATEGY 2. More women in leadership positions* **2.1.1 Improved compatibility of family and career**	• Extent of experienced work-family conflict (Rice) • Perceived challenges in balancing private life and work (AKKA, Athena SWAN) • Satisfaction with current work-life balance (ESWN) • Perception of influence of career break on career progress (Athena SWAN) • Ability to balance work-life (LDW) • Who is entitled to take parental leave (ECNGD, p.32) • Flexibility of parental leave arrangements (ECNGD, p.33) • Average duration of parental leave	• On-site child care is seen to reduce job stress (Rice) • Range of institutional support (child care; partner/spousal hiring; health accommodations; career planning; etc.) (LEAP) • Work/life culture points enables work-life balance (family-friendly working conditions; flex-time, work-family policies, etc.) (Athena SWAN) • Working time culture – average working time compared to contracts, all inclusive contracts, working on weekends, during the night, etc. (JR) • Opportunity to bring family along during stay abroad (VINNMER)	• Possible duration of maternity leave (ECNGD, p.31) • Possibility of paternity leave (ECNGD, p.31) • Possible duration of parental leave (ECNGD, p.32) • Legal right to reduce working time on request (Elternteilzeit) (ECNGD. p.35) • Compensation rate for wages for maternity/parental leave (ECNGD, p.34) • Protection against dismissal (ECNGD, p.35) • Additional paid leave for working parents (ECNGD, p.34) • Who is entitled to take parental leave (ECNGD, p.32)

3 PROFESSIONAL CAPABILITIES

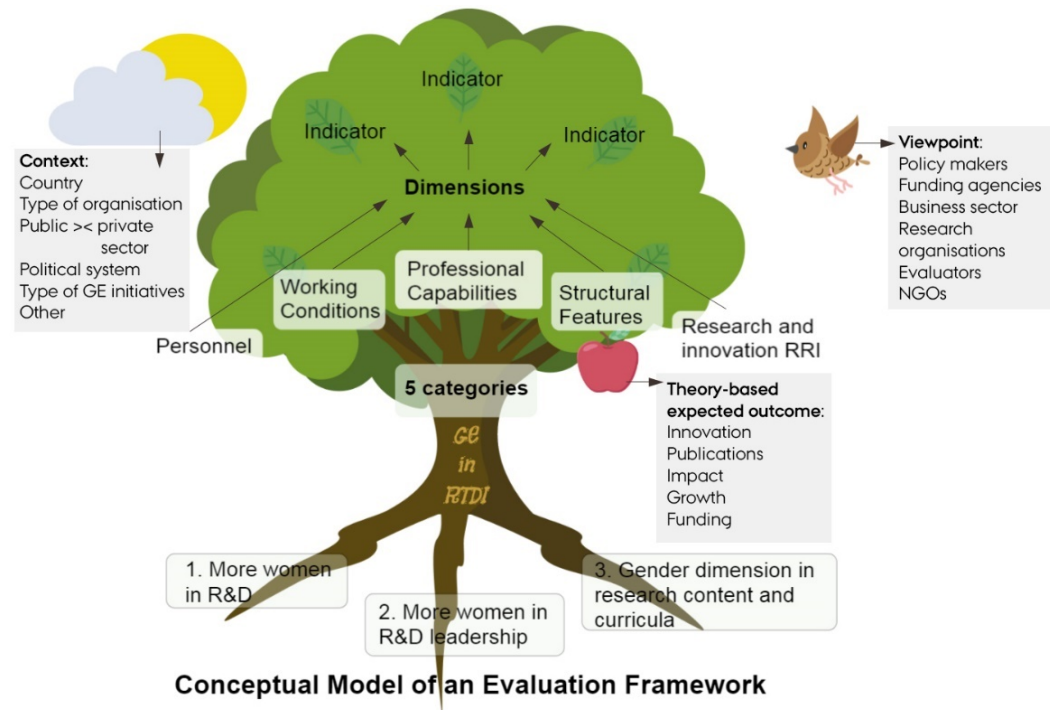| RESULTS/ POLICY MEASURE STRATEGIES	INDICATORS AT TEAM LEVEL	INDICATORS AT ORGANISATIONAL LEVEL	INDICATORS AT POLICY/ COUNTRY LEVEL
3.1 GENDER EQUALITY DIMENSION: **LEADERSHIP**			
STRATEGY 2. More women in leadership positions **3.1.1 Increased confidence and ability of leadership roles**	• Ability to apply and exercise learned leadership skills (LDW, Uppsala) • Attractiveness and personal motives to take up leadership positions (AKKA) • Growth of knowledge about local leadership and organisation culture (LDW) • Perception of own role being a leader concerned with supporting women's opportunities (LDW) • Contribution to the participant's self-perception as a primary investigator/project leader (DUN) • Tangible examples of leadership development skills in daily work (Uppsala)	• Implementation of leadership development programme (VINNMER) • Assessing deans/chairs/committee leaders by assessment criteria, professional requirements, stereotypes (Advance IT) • Organisational views of the advancement of women by structural features (Athena SWAN) • Mentoring system from the very beginning when one enters the organisation (NaTE) • Visibility of women at the university/organisation (AKKA) • Share of projects directed by women (LDW)	• Women with leadership positions (AU) • Visibility of women at national level (AU)

4 STRUCTURAL FEATURES

RESULTS/ POLICY MEASURE STRATEGIES	INDICATORS AT TEAM LEVEL	INDICATORS AT ORGANISATIONAL LEVEL	INDICATORS AT POLICY/ COUNTRY LEVEL
4.1 GENDER EQUALITY DIMENSION: **GENDER EQUALITY CHALLENGES/BARRIERS**			
STRATEGY 1. More women in R & D STRATEGY 2. More women in leadership positions **4.1.1 Decrease of GE barriers**	• Perception of a gender-orientated receipt of attention (Athena SWAN) • Perception of working up effort with respect to gender (Athena SWAN) • Acknowledgement of gender issues in team (AKKA) • Acceptance of cultural change (Athena SWAN) • Value of gender promoting measures (ESWN) • Experienced sex discrimination/sexist remarks (ESWN) • Level of visibility (Rice)	• Acknowledgement of gender issues (AKKA) • Acceptance of cultural change (Athena SWAN) • Sustainability of gender equality initiatives (Athena SWAN, LDW) • GE dedicated administrative staff (Athena SWAN) • Enacting of policy change (Advance IT) • Science communication culture (MoRRI) • Citizen science activities in RPOs (MoRRI) • RPO support structures for researchers as regards incentives and barriers for data sharing (MoRRI) • Integration of GE in KPIs (FI)	• Main challenges concerning GE in RTDI (ECNGD, p.41) • Percentage of schools (primary and secondary) that have programmes promoting GE issues in regard to career choices (MoRRI) • Perception of gender roles in science amongst young people and their parents (MoRRI) • Percentage of parents who believe their children (daughters) will have equal opportunities to pursue a career in STEM (MoRRI) • Percentage of research institutions that document specific actions that minimize/reduce barriers in work/en

5 RESEARCH & INNOVATION/RRI

RESULTS/ POLICY MEASURE STRATEGIES	INDICATORS AT TEAM LEVEL	INDICATORS AT ORGANISATIONAL LEVEL	INDICATORS AT POLICY/ COUNTRY LEVEL
5.1 GENDER EQUALITY DIMENSION: **INNOVATIONS & INNOVATIVE APPROACHES**			
STRATEGY 1. More women in R & D STRATEGY 3. Gender dimension in research content and curricula **5.1.1 Research priorities and outcomes in terms of GE**	• Personal experience and interests (Stanford) • A desire to address societal problems (Stanford) • Beliefs and unconscious assumptions (Stanford) • Women's perception of their ability to be an entrepreneur and to hold themselves to a stricter standard of competence (FI, A29) • Women's perception to hold themselves to a stricter standard of competence (FI, A29) • Degree of fear of failure (FI, A28)	• Professional career tracks and standards for promotion (Stanford) • A desire to address societal problems (Stanford) • Turnover in RPOs (FI, A7) • Composition of gendered product development (FI, A7)	• Initiatives of public and private funders and other stakeholders (Stanford) • Industrial funding and lobbying (Stanford) • Military funding priorities and lobbying (Stanford) • Composition of innovation policy putting more emphasis on social and service innovations (JR, A26) • Health funding priorities and lobbying (Stanford) • Regulatory environment (Stanford) • Market research on competitors or particular market segments (Stanford) • The configuration of academic disciplines (Stanford)

Context:
Country
Type of organisation
Public >< private
         sector
Political system
Type of GE initiatives
Other

Indicator

Indicator   Indicator

Dimensions

Personnel

Working   Professional   Structural
Conditions   Capabilities   Features

Research and
innovation RRI

5 categories

GE
in
RTDI

Viewpoint:
Policy makers
Funding agencies
Business sector
Research
organisations
Evaluators
NGOs

**Theory-based
expected outcome:**
Innovation
Publications
Impact
Growth
Funding

1. More women
in R&D

2. More women in
R&D leadership

3. Gender dimension in
research content and
curricula

Conceptual Model of an Evaluation Framework

Thank you for your attention!

EFFORTI