

D2.2 North West Country Cluster Report

Eva Sophia Myers (SDU) Liv Baisner (SDU)

20 September 2023



Project no. 101058537

Project acronym: INSPIRE

Project title: INSPIRE: Centre of Excellence on Inclusive Gender Equality

in Research & Innovation: Creating Knowledge & Engaging

in Collaborative Action

Call: HORIZON-WIDERA-2021-ERA-01

Start date of project: 01.10.2022

Duration: 48 months

Deliverable title: D2.2 4 x Country-cluster reports, Member States country

information - North West Country Cluster Report

Due date of deliverable: 29 September 2023

Actual date of submission: 29 September 2023

Deliverable Lead Partner: Notus

Dissemination level: Public

Authors & contributors name and organisation	Role
Eva Sophia Myers, SDU Liv Baisner Petersen, SDU	Lead authors
Paola Chaves Pérez, RU	Quality assurance editor



Disclaimer

While INSPIRE is funded by the European Union, views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the European Research Executive Agency (REA) can be held responsible for them.

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101058537.

Consortium

FUOC	Fundació per a la Universitat Oberta de Catalunya, Spain
JR	Joanneum Research Forschungsgesellschaft Mbh, Austria
SDU	Syddansk Universitet, Denmark
UJ	Uniwersytet Jagiellonski, Poland
Notus	Notus, Spain
FLACSO	Facultad Latinoamericana De Ciencias Sociales, Argentina
EM	Europa Media Szolgaltato Non Profitkozhasznu Kft, Hungary
Portia	Portia gGmbH, Germany
SRU	Stichting Radboud Universiteit
Fraunhofer	Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung EV, Germany
UH	Universiteit Hasselt, Belgium
ZRC SAZU	Znanstvenoraziskovalni Center Slovenske Akademije Znanosti In Umetnosti, Slovenia
GESIS	GESIS-Leibniz-Institut für Sozialwissenschaften EV, Germany
INNO	Innosystems Symvouleutikes Ypiresies Kai Efarmoges Pliroforikis Ypsilis Technologias Monoprosopi Idiotiki Kefalaiouchiki Etaireia, Greece

	Document History						
Version	Date	Summary of changes	Revised by				
01	10.08.2023	First draft	Eva Sophia Myers & Liv Baisner				
02	21.08.2023	External review	Maria Caprile, Lorena Pajares & Dalia Argudo				
03	24.08.2023	Second draft	Eva Sophia Myers & Liv Baisner				
04	30.08.2023	External review	Maria Caprile, Lorena Pajares & Dalia Argudo				
05	06.09.2023	Quality Assessment Edition	Paola Chaves				
06	20.09.2023	Final version	Eva Sophia Myers & Liv Baisner				

Table of Contents

Li	st of Aci	ronyms	
Li	st of Tak	oles	2
1		ction	
2	Legal a	nd policy framework	5
	2.1	Legal Framework	5
	2.2	Policy Framework	
3	Structu	ral Change	9
	3.1	Literature Review	14
	3.2	Initiating change	17
	3.3	Sustaining Change	
	3.4	Intersectionality	22
	3.5	Gendered innovations	
	3.6	Data monitoring	25
4	R&I Org	ganisations	
5	Engage	ed stakeholders	26
	5.1	Policymakers	27
	5.2	Research Funding Organisations	27
	5.3	Research Performing Organisations	28
	5.4	Communities of Practice	28
6.	Training	g Resources	
7	Conclu	sions	33
R	eference	s	36



List of Acronyms

CCR Country Cluster Report

CoP Community of Practice

CV Curriculum Vitae

EC European Commission

EDI Equality, Diversity and Inclusion

EO Equal Opportunities

ERA European Research Area

EU European Union
GE Gender Equality

GEP Gender Equality Plan

GBV Gender-based violence

HE Higher Education

HEI Higher Education Institution

HR Human Resources

ICT Information and communications technology

NAP National Action Plan

NGO Non-governmental Organisation

RFO Research funding organisation

RPO Research performing organisation

R&I Research and Innovation

R&D Research and Development

SDG Sustainable development goals

STEM Science, Technology, Engineering, Mathematics



List of Tables

Table 1. Overview of protected characteristics	7
Table 2. Assessment of national legal and political framework, by topic	8
Table 3. Selected literature by country, topic and type of R&I organisation	16
Table 4. Assessment of current knowledge in the country, by topic	17
Table 5. Degree of uptake of GEPs by type of R&I organisation	17
Table 6. Type of organisations as 'newcomer' implementing GEPs	18
Table 7. Use of alternative instruments to GEPs	18
Table 8. Number of R&I organisations, by type	26
Table 9. Overview of policy makers' indication of interest	27
Table 10. Overview of RFO's indication of interest	27
Table 11. Overview of RPO's indication of interest	28
Table 12. Overview of existing networks' and/or associations' indication of interest	28
Table 13. Training resources in English	30
Table 14. Training resources in national languages	32



1 Introduction

This is one of the four country cluster reports which analyse the results of the expert survey conducted by INSPIRE, a Horizon Europe project aimed at building a sustainable centre of excellence on inclusive gender equality in research and innovation (R&I).

INSPIRE survey

The survey involved one expert in each EU27 Member State and provided crucial support to the INSPIRE research programme on structural change towards inclusive gender equality in R&I, through:

- collecting information and analysis on policy developments and research debates at the national level; and
- identifying engaged stakeholders, other potential experts and relevant resources in the country, as well as collecting suggestions to support existing or potential initiatives for developing new communities of practices (CoPs).

The information collected was also meant to be a useful resource for the R&I ecosystem in Europe and beyond, including policy makers, researchers and equality practitioners across Europe.

The survey focused on **structural change towards inclusive gender equality in R&I organisations** in the country, defined as a long-term, sustainable process aimed at building an institutional environment (values, norms, structures and procedures) in which inclusive gender equality is widely discussed and explicitly embraced in organisational and individuals' practices having a demonstrable impact on reducing gender and other axes of inequality and discrimination within the organisation.

A **Gender Equality Plan** (GEP) is an **instrument** to institutionalise a gender equality policy and implement a structural change process. In the survey, GEP was defined according to the eligibility criterion and minimum requirements established by the European Commission to participate in Horizon Europe. Organisations may adopt similar/equivalent instruments to implement structural change or alternative instruments. These **alternative instruments** may focus only on gender or be interventions that fall under the umbrella of Equality, Diversity, Inclusion (EDI) policies, or just diversity policies.

The survey addressed **five topics** of interest related to structural change:

- Initiating change: How organisations can be encouraged to adopt a gender equality policy (GEPs and equivalent/alternative measures) based on local knowledge, experience and change movements as well as evidence-based tools (e.g., gender equality audit).
- Sustaining and deepening change: How organisations can address resistances and sustain and deepen change by building institutional gender competence, dedicating resources and structures, promoting evidence-based measures and broadening the scope of intervention (e.g., integrating sex/gender analysis in curricula or research content; implementing a sexual harassment protocol).



- Adopting an intersectional approach: How organisations can move from GEPs and/or EDI interventions to inclusive intersectional GEPs fostering change towards equality.
- Implementing **gendered innovations**: How innovation clusters and private R&I companies can be encouraged to implement gendered innovations that is to innovate by integrating methods of sex and gender analysis into their R&I products or services, ideally taking into account also other axes of inequality and discrimination.
- Monitoring inclusive gender equality: How organisations can support an evidence-based inclusive gender equality by implementing effective monitoring conceptual approaches, tools and indicators in particular in the four topics identified above (initiating change; sustaining and deepening change; adopting an intersectional approach; implementing gendered innovations).

The survey addressed structural change in all types of R&I organisations:

- Research funding organisations (e.g., research Ministries and public bodies funding basic and applied research; innovation agencies; other public and private institutions funding research and/or innovation).
- Research performing organisations:
 - Higher education institutions (public and private)
 - Other public research performing organisations (publicly funded research institutes)
 - R&I companies (e.g., private companies providing R&I products or services)
 - NGOs and other non-profit research performing organisations (e.g., private R&I foundations)

Country cluster report

The comparative analysis of the survey was conducted in four country cluster reports: North West countries, Central West countries, Southern countries and Central East and Eastern countries.

This North West country cluster report analyses the results of the survey in four countries: **Denmark**, **Finland**, **Ireland** and **Sweden**. The information used to elaborate this report was collated by the following experts:

- Denmark Liv Baisner Petersen and Eva Sophia Myers¹
- Finland Suvi Heikkinen
- Ireland Eileen Drew
- Sweden Minna Salminen-Karlsson

For further details regarding the methodology followed to collect the information and elaborate this report, please refer to the Methodological Annex.

¹ The experts from Denmark are affiliated to SDU, an institution member of the INSPIRE consortium.



2 Legal and policy framework

2.1 Legal Framework

In two of the four countries, Sweden and Ireland, there have been no legal changes in gender equality in R&I since the actualisation of the GEAR tool (August/September 2021). In Denmark and Finland, there have been legal changes to overriding national laws (i.e., not explicitly for R&I) in this period in the form of amendments to existing laws, most of these on the basis of external developments, such as the EU parental directive implementation and the #metoomovement which has impacted political debate. Others include updating grounds and means of discrimination and outdated requirements, such as medical proof of sterility in transgender persons. In Denmark, where gender equality is regulated as an overriding employment issue (for any sector), several amendments have been passed. Notably, the Gender Equality Act regarding strengthened protection of LGBTI-persons against discrimination, hate crimes and hate speech and persons with disabilities against hate speech (December 2021). This is accompanied by a corresponding amendment of the Act of Prohibition of Discrimination in the Labour Market. Moreover, the Gender Equality Act has been strengthened with targets and policies for gender composition of top management and boards in public institutions and public companies (May 2022). This was followed by a prohibition against employers' screening of job applicants based on their age (March 2022). The Equal Treatment Act has seen two material amendments in the period: Implementation of the 2019/1158 EU leave directive's provisions on carer's leave, redundancy protection, etc (June 2022) and implementation of the 'Tripartite Agreement on Initiatives to Combat Sexual Harassment at the Workplace' which extends the possibilities for sanctions (March 2022). The implementation of the EU parental leave directive also gave rise to one material amendment of the Maternity Leave Act (June 2022) along with two other amendments put into effect at the same time. First, the introduction of earmarked leave, equal distribution of the right to maternity allowance and the right to transfer maternity allowance to welfare parents, close family members and others. Second, a sharpening of the Danish state-funded employment sickness benefit supplement, such as a reduction of allowance period for eligible recipients, a reduction of the rate for non-supporters, as well as an introduction of a language requirement for non-Danish recipients.

In Finland, the transgender law was amended in April 2023, so that transgender individuals can legally change their gender by self-declaration without having to undergo a lengthy medical process which, under the previous law, included a psychiatric assessment. In addition, the amendment abolished the requirement that transgender people must be unable to reproduce, as the previous law required a medical certificate that the person was sterile for legal confirmation of their gender.

In terms of representation, Finland has a requirement that organisations that employ more than 25 people have explicit gender equality plans. However, gender equality in private companies and other organisations is primarily seen and treated as a question of *representation* in management and boards. In Denmark, this includes a sharpened requirement, laid down in the Equality Act and valid from January 2023, that public institutions and companies have and regularly report on explicit targets, policies and strategies for implementing equal gender distribution of management. In Finland, there is a requirement that at least 40% of planning



and decision-making bodies of state and municipalities must be made up of both men and women.

2.2 Policy Framework

Of the four countries, only Ireland has seen main changes in policy frameworks regarding gender equality in R&I, based on proposals and recommendations in the Higher Education Authority (HEA) 2022 Gender Equality Report: 2nd HEA National Review of Gender Equality in Irish Higher Education Institutions. This includes improving and advancing Gender Equality Plans (GEPs) in alignment with Horizon Europe requirements and Gender Action Plans (GAPs) in compliance with the Irish Athena SWAN framework. These areas key instruments for implementing change measures and documenting and monitoring impact and effect, improved and clear monitoring structure and progress tracking and evaluation at institutional as well as national levels, embedding capacity building and resource and workload allocation for staff responsible. Furthermore, intersectional approaches and actions focused on vulnerable groups have been more prominently embedded, and actions to implement consent framework and zero tolerance of sexual violence and harassment have been integrated. Ireland is also the only of the four countries to explicitly integrate and advance an intersectional approach likewise outlined in the 2022 HEA expert review. Here it is proposed that implementation of EDI strategies that centrally take an intersectional approach are given a timeframe of 3-4 years. The review explicitly recommends that, for this transition, EDI units be resourced with significant expertise, senior professional services and relevant research capacity specifically to provide advice and guidance on enacting intersectionality-focused measures, e.g., in relation to recruitment, promotion, organisational culture. Moreover, efforts to create intersectional interventions should involve broad-based coalitions of staff and students who will be duly recognised and compensated for their work. Also, to avoid a tendency to roll out initiatives on one equality ground after another.

Similarly, according to AdvanceHE, the new Athena Swan Ireland Framework (from the end of 2021) prompts institutional applicants to begin to build a foundation for more intersectional approaches through the collection of relevant data, narrative reflection and a requirement for priority areas in the action plan on intersectionality.

Overall, concerning **intersectionality**, it emerges that concerted policy efforts are most advanced in Ireland and even here it is still very much in its initial stages with focus primarily on building the foundation for the integrating intersecting grounds for discrimination into existing equality approaches. In all four countries, where focus is on mitigating discrimination these are still treated in isolation, and thus not in a way that takes adequate account of the implications of how these grounds *intersect*.

In terms of R&I policies that foster private companies and / or other R&I organisations to take gender into account in their R&I products or services, only Sweden has provisions in place in the form of a gender equality policy. This is the case in The Swedish Innovation Agency, which finances much of technological research and innovation for SME's as well as joint ventures between public research institutions and R&I-intensive companies. Moreover, The Swedish Agency for Economic and Regional Growth, which promotes sustainable growth and competitive companies, pays attention to the issue and has guidance on how to integrate a gender perspective. There is evidence of rising awareness and attention to these perspectives



in single sectors/industries. In Finland and Denmark, gender equality is primarily seen and treated as a question of *representation* in management and boards.

Prohibition of discrimination is in all four countries legally enshrined in non- or antidiscrimination acts and promoted in equality and equal treatment acts, as well as various employment-related acts, policies and agreements, such as, ombudsman acts in Sweden and Finland; Employment Equality and Pensions Acts in Ireland; work environment and occupational health and safety acts in Denmark and Finland; Tripartite agreements in Denmark, and a penal code prohibiting goods and service providers to discriminate in Sweden. All four countries have national bodies of ombudsmen and national human rights institutions. Cases are often handled by general or labour courts. These, however, are often subject to restrictive interpretation, usually to the disadvantage of claimants. Correspondingly, compensation is generally low. Thus, despite comprehensive legislation, law enforcement concerning discrimination is not as comprehensive, well-established nor efficient as the legislation warrants.

rotected characteristic	Denmark	Sweden	Finland	Ireland
Sex ²	X ³	Х	Х	
Gender ⁴	x ¹			Х
Gender identity or gender expression ⁵	x ¹		Х	
Transgender identity or expression		Х		
Sexual orientation	X ⁶	Х	Х	Х
Age	x^7	Х	X	Х
Origin			Х	
Ethnicity	x^3	Х		
Nationality	x^3		Х	
Social origin	x^3			
Language			X	
Race	x ³			Χ
Skin Colour	x ³			
Religion	x ³	X	X	Χ
Belief	x ³	X	X	
Opinion	x^3		X	
Political activity			X	
Trade Union Activity			Х	
Family status				Х
Family relations			Х	
Civil status				Х

² Please note that the categories *sex*, *gender* and *gender identity/expression* are translated from the Danish, Swedish and Finnish that do not have equivalent terms for gender to the English, therefore they are listed here as reported by the national experts. They partly overlap or cover the same continuum consisting of (biological) sex, (cultural) gender and the more differentiated use of gender identity and/or gender expression (used in Sweden).

³ DA Stipulated in the Equality Act

⁴ See note 1, above

⁵ See note 1, above

⁶ DA Stipulated in both the Discrimination and Equality Act

⁷ DA Stipulated in the Discrimination Act



Health			Х	
Disability	x^3	Х	Х	Х
Membership of the Traveller Community				Х
Any other personal grounds			Х	

An overall assessment of the current national legal and policy framework situation in the four countries, in terms of their adequacy in fostering or sustaining significant advances in the field of inclusive gender equality in R&I, is given in Table 2, and, based on input from the four national experts, illustrates clearly that Ireland is at the forefront both with regard to legislation and practice and in terms of positive development, while Finland and Sweden demonstrate comprehensive positions. As shown in Table 2, Finland is in a stronger position with consistent positive development, whereas Sweden's longstanding position in the forefront is under rising political threat. The standing in Denmark is markedly poorer than the other three, with less comprehensive action, less positive development than in the other three countries and significant public and political opposition.

Table 2 gives an overview of the four national experts' overall assessment of their national situation.

Table 2. Assessment of national legal and political framework, by topic							
Country	Initiating change	Sustaining and deepening change	Adopting an intersectional approach	Implementing gendered innovations	Monitoring inclusive gender equality		
Denmark	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient		
Finland	Insufficient	Adequate	Insufficient	Adequate	Adequate		
Ireland	Highly adequate	Highly adequate	Insufficient	Adequate	Highly adequate		
Sweden	Adequate	Adequate	Insufficient	Insufficient	Insufficient		



3 Structural Change

The socio-cultural, political and economic contexts of the four countries impact the institutionalisation of gender equality in R&I in different ways. All four countries have made significant advances, where Sweden and Finland have the longest and strongest track records, and Ireland has made the most impressive recent advances in terms of integrating an intersectional approach. A widespread self-conception of being highly advanced in terms of equality is prevalent in all four countries. In the three Scandinavian countries, there are persistent and rising anti-gender forces at play, which negatively impact the positive advances and potential for progress, while this seems to be qualitatively different in Ireland.

In the following, the situation for each of the four countries is detailed along with the most significant practical lessons from each context.

Denmark

Denmark is often seen as advanced in gender equality as the other Nordic countries. Historically, this is true; Denmark was among the first to implement the vote for women (1915) and was at the forefront of the feminist movement in the 1970'es. Denmark is an advanced welfare state with long traditions of public free education, stable democratic institutions, solid, accessible and largely subsidised healthcare, maternity leave, day care, free tertiary education with financial stipends, high social capital and low degrees of corruption. However, decades of sweeping neoliberal reforms and successive waves of severe cutbacks on public spending have resulted in starved institutions, and this is beginning to seriously hurt processing, decision making and professional outcomes.

Regarding gender equality in general, Denmark increasingly lags behind her neighbours – presently occupying a 32nd place on the 2022 World Economic Forum Global Gender Gap Index, while Iceland, Finland, Norway, and Sweden are placed 1st, 2nd, 3rd, and 5th, respectively. Gender equality and especially sexual harassment are conceptualised as primarily work-related issues and, thus, placed in the work domain. Strong and explicit requirements do exist; however, awareness is low, and compliance is at best highly varied with hardly any sanction. A persistent lack of explicit focus, practice and accumulated institutional experiences with gender mainstreaming and systemic measures, leave a gap in the conceptualisation and practice of equality, diversity and inclusion measures (BCG, 2019). Moreover, Danish educational choice and labour market are highly gender-segregated (Danish Accreditation Institution, 2020).

Socio-culturally and politically, the self-conceptualisation is that Denmark is (still) at the forefront of gender equality, with a prevailing understanding of gender equality as a question of representation, and therefore quotas, which meets strong and vehement opposition partly because these challenge the ideal of meritocracy and a strong 'arm's length principle' towards the regulation of the labour market and individuals' choices. Approaches to gender equality are in the public domain and dominated by neosexist⁸, postfeminist⁹ standpoints – which filters

⁸ Neosexism holds that gender equality has been achieved and that sexism and gender-based discrimination does not exist

⁹ Postfeminism is a simultaneous celebration and disavowal of feminism



into Academia (Skewes et al., 2019, 2021) – with the consequence that attempts to bring gender equality and intersectional practices up to date and aligned with international practice are fragmented and lack consistent, continued, explicit support from the political top.

This, however, might be changing: the second #metoo wave in Denmark in the fall 2020 (sexismedu, 2021) seems to have reset codes of behaviour and ethics and addresses questions of power abuse, sex, gender, gender identity, sexuality, and (sexual) harassment. The public debate across the political spectrum is showing a shift towards general acceptance that there is a need to change the current gender imbalance, which poses a threat of loss of talent and market opportunities, and that a change can only be achieved through systematic efforts.

For gender equality in Danish R&I, the HEU GEP-eligibility criterion has boosted the implementation of concerted, systematic efforts on an unprecedented scale in RPOs and taking on the challenge of achieving equality. RFOs are increasing their systematic sex disaggregated data; orienting themselves to international practices; implementing measures to mitigate gender imbalance, improving equal access to resources and career progression; and mitigating bias in selection (UFM, 2022; McKinsey, 2018; DFiR, 2019). A rising demand from public and private R&I and HEI organisations seems to drive the development. This includes a shift in perspective from a sceptic view of EU policies to seeing these as forward-thinking and welcome levers for positive change.

Practical lessons learnt: In Denmark, sex-disaggregated data on the population of researchers and career and recruitment at Danish universities have been collected up till 2017 with irregular intervals. Also, data on resource and grant allocation was collected on an ad hoc basis, primarily for stand-alone analyses and reports with targeted foci. These were carried out by various funding organisations and research policymakers. These ad hoc reports have since 2013 been produced with higher frequency. In 2017, after a longer hiatus in the university reports, the Danish Agency for Higher Education and Science decided to publish sex-disaggregated data for the university sector annually; however, due to elections and other factors, this has in practice meant for 2017, 2018, 2019 and 2022. This is a significant step in the prevailing Danish gender equality environment, even if it is still not completely and unequivocally embedded, as the gap between 2019 and 2022 shows.

On the other hand, a matching and growing demand by the RPOs themselves for reliable and sector-wide data seems to keep the momentum – not least powered by the organisational data needs in relation to HEU GEP-eligibility criterion. This demand is increasingly being refined and coordinated across universities in a network for gender equality practitioners in the Danish University sector, GEAR:DK, established in 2017 as an outcome of the FP7-funded FESTA-project (implementation of gender equality for women in STEM) on the initiative of SDU (project partner in FESTA). The network has become established as a resource also to the Danish Rectors' Association 'Danish Universities' and has become consolidated as a functioning community of practice, not least in the context of implementing GEPs following HEU's requirements.



Sweden

For a long time, Sweden has been at the forefront in implementing gender equality, which has been a national pride (Having this as a national pride has not been unproblematic, though, as analysed in Martinsson, Griffin & Giritli Nygren, 2016). This gives a basic background to what is happening in gender equality in R&I today.

The political scene changed rapidly in autumn 2022, when a right-wing government, supported by the right-wing populist party Sverigedemokraterna (Sweden Democrats) came to power. Sweden Democrats have a conservative gender ideology and they have more power in the political scene than their position outside the government would imply. In particular, they oppose research about gender (Martinsson, 2022).

Basic institutionalisation of gender equality has been integrated into the higher education sector, and the current gender mainstreaming requirement for each higher education institution is in force through 2025 (Jämställdhetsmyndigheten, 2021). Some kind of gender equality officer exists in all universities. However, even if gender equality is seen as a separate issue from other diversity issues, many gender equality officers are responsible for the whole diversity area, without adequate resources. Hence, on one hand, the staff resource is often not adequate to work for structural change for gender equality and, on the other hand, there is the more precise policy requirement for gender mainstreaming which must be done, at least until 2025. Many of the gender equality officers work in HR departments, which restricts their vision of structural change.

The private sector in Sweden is in several aspects less interested in gender equality and diversity than many other countries in Europe. According to a survey by Sapio Research and Workday (https://vdtidningen.se/svenska-foretag-pa-efterkalken-nar-det-galler-jamstalldhet-och-mangfald/), fewer companies have a budget for equality measures and fewer people in leadership positions think that working towards gender equality is important.

The statement that more diversity, especially more women, increases productivity is a driver – it is not contradicted and efforts for gender equality are motivated by it. However, the commitment in companies to *structural change*, rather than trying to recruit more women, is still rare (Ingenjörsvetenskapsakademin 2021 is an example of that) However, there are a few examples, also showcased in specialist journals of companies, that have implemented structural changes¹⁰. These are seen as role models and pioneers, but this position also sets them apart from being seen as examples of normal course of business. Also, experiences discussed in female networks, in particular in male-dominated areas, show that there is still much work to do. Specialist journals and websites leave the impression that awareness of the problem is increasing, even if the first step to structural change is far from being completed.

Practical lessons learnt: Generally, the heavy engagement of the state and the requirements for gender equality actions by the Ministry of education (which also has research in its area of

¹⁰ Examples are:

⁻ Sandvik, https://www.home.sandvik/se/nyheter-och-media/nyheter/2017/03/insatser-for-okad-jamstalldhet-och-mangfald/

⁻ Höganäs AB https://www.hoganas.com/sv/news-and-events/news/2019/hoganas-ab-prisas-for-sitt-jamstalldhetsarbete/

Svevia, https://www.svevia.se/projekt/innovation-utveckling/matning-av-machokultur/



responsibility) are fundamental in keeping the issue on the agenda. The task of the Gender Equality Agency to monitor and provide support legitimises the work in single institutions (Sjöberg Forsberg, 2022; Jämställdhetsmyndigheten, 2023). In practice, this includes knowledge enhancement and joint meetings / trainings for higher education institutions, as one group, and for the main research funders together with a number of other state authorities)

An example of good practice, which shows the manifold actions that need to be taken, is the way the Swedish Research Council has worked with integrating gender in its processes of evaluation. Three pilot areas are described in Vetenskapsrådet, 2018. The initiative had several features: 1) establishing a working group; 2) analysing statistics on funding according to gender and according to the gender content in the proposal; 3) informing the applicants in several ways on the meaning of gender perspective in research content – the call, the Council's webpage, newsletters; 4) sending a survey to the applicants after proposal submission to elicit additional information on these issues; 5) training for all staff; 6) creating support material to all administrators who answer inquiries from applicants, in addition to asking them to forward all inquiries to the working group for their information; 7) in collaboration with the head administrator of each of the pilot areas, creating guiding texts, different for different scientific areas, in the handbooks that the peer reviewer evaluators use in evaluating proposals (the evaluators would have liked still more guidance on how to weigh the gender aspect in the evaluation); 8) amending proposal templates with a question whether gender perspective was relevant and why – with a reminder that if it was relevant the proposal itself should take it into account; 9) observing funding meetings to see how gender perspective was dealt with.

Another example of a practice that is a good start and can be improved is the Vinnväxt programme by the Swedish Innovation Agency (Jonasson Tolv & Lööf, 2021). In their work with three innovation hubs, which include public actors as well as private companies with male-dominated leadership, the Agency learnt that, in addition to clearly explaining the benefits of gender equality, as a funder they could: 1) make sure that equality issues are anchored at the highest level of the partaking organisations; 2) provide clear advice on who should be made responsible for gender equality at the implementation level; 3) provide detailed requirements of what the partaking organisations more exactly should do; 4) require reporting on equality measures in the same template as technical advances and financial outcome; 5) provide more information on the webpage and a contact person on equality issues; and 6) ensure research following the gender equality work.

Finland

Finland has for a long time enjoyed a strong position as a country with advanced gender equality, this may result in the assumption that gender equality has been achieved at work, and, therefore, gender equality is no longer a relevant question in Finnish R&I (Korvajärvi, 2021; Tanhua, 2022). Finnish society has a strong tradition of gender equality work and social welfare policies, and this affects both positively and negatively the institutionalisation of gender equality in different sectors. Finland has strong divisions of female and male-dominated sectors, and of these, R&I is still highly masculine. Even if the social norms and expectations around gender roles have evolved to become more inclusive (Lund et al., 2019), there are still gender equality problems and problems vary greatly regionally in terms of education, career progression, and gender division in leadership positions (Vehviläinen & Valaskivi, 2022; Tanhua, 2022).



In terms of political context, Finland can be characterised as having a strong commitment to gender equality, which is reflected in its national policies and legislation. The Finnish government has set targets and goals for gender equality in various sectors, but still, the assessment of the development and the consequences of unethical behaviour in ways adverse to equality are yet to be (fully) implemented. Furthermore, the government has implemented measures to promote gender equality in R&I, such as funding programs for women in STEM and a requirement of GEPs from research organisations for them to receive public funding.

Traditionally, Finland's economy has been highly dependent on innovation and technology, and the country has a strong focus on R&I. The government recognises the importance of diversity and gender equality in innovation and has taken steps to ensure that women are represented in R&I at the policy level, but the practice for the organisations and companies is still underdeveloped (Jousilahti et al., 2022). A lack of top management commitment and postfeminist thinking often results in the value of gender equality in R&I remaining invisible and unrecognised (Korvajärvi, 2021; Gabriele & Vehviläinen, 2021).

Practical lessons learnt: One example of good practice in Finland is the GEP implemented by the Academy of Finland, which provides funding for research projects. The GEP requires applicants to provide a gender analysis of their proposed research and to demonstrate how gender equality and non-discrimination will be promoted throughout the project (gender distribution, work-life balance, research careers etc). The Academy also provides training and support for researchers to develop gender-sensitive research practices. This has resulted in an increase in the number of women participating in research projects and an improvement in the quality of research. Moreover, ensuring an anonymous recruitment process is a measure that has been developed in some companies, and this has been detected to decrease biases and discrimination.

Ireland

Ireland has undergone a massive and urgent transformation towards gender equality in the 21st century. The groundwork lies in the previous decades with pressure building that was traditionally not matched by political commitment for gender equality. Education policy, that introduced free access to free secondary education (high school and equivalent) in the 1960s, was followed by massive take-up by women who have overtaken men in terms of educational attainment/qualifications. According to the official HEA statistics for 2019 (the latest published), the percentage of tertiary education graduates in Ireland is 50% for women and 31% for men. The comparable data for Sweden is 43% for women and 34% for men. Hence the take-up of tertiary education has benefited women in Ireland more than men, where the gap in attainment is 19% compared with 9% in Sweden (Data from https://hea.ie/).

Furthermore, entry to the EU required the enactment of the Employment Equality and Anti-Discrimination law, which abolished the existing 'marriage bar' and guaranteed equal access and equal pay for women.

Ireland has become an attractive place for external investment, particularly in ICT, and this created an economic boom and rising demand for labour (now increasingly from outside Ireland) thereby creating a growing demand for highly educated recruits.



Ireland has continued to liberalise on what had been controversial issues via its Citizens' Assembly, a body formed from the citizens of Ireland to deliberate on a number of issues referred which were to it by the Houses of the Oireachtas (https://2016-2018.citizensassembly.ie/en/Resource-Area/FAQ/). The Assembly provides a platform for a cross-section of the public to hear presentations from experts and civil society groups and to engage in rational and reasoned discussion, and to then make recommendations to the State on the options available. This led to reform of the Irish Constitution, following referenda on social issues: Divorce, Abortion, Gay Marriage and (most recently) Gender Equality. These reforms have contributed to the new social/political agenda in Ireland. Feminist lobbying, including the National Women's Council, was important in arriving at this outcome.

The instrumental role of the Higher Education Authority in supporting and funding a pilot phase for Athena SWAN in Irish HEIs has been vital, following the HEA Reports in (2016, 2018 and 2022). These have reinforced and institutionalised earlier developments and successes.

Practical lessons learnt: EU Projects were instrumental, which in combination with a positive political climate and national culture, including a long tradition for embedded participatory, expert-informed democratic processes have led to conducive processes and high degree of uptake of recommendations and facilitated the deep and wide realisation in HEIs that gender equality was not only compatible with, but essential to, competition/rankings.

A crucial momentum was the successful linking of HEI funding from the highest authority levels with Athena SWAN's gender equality targets and the alignment between the Athena SWAN incentives with a corresponding linking of funding to an institution's performance in addressing gender inequality.

In the following, a short review of recent relevant literature in the four countries is presented, followed by a presentation of advances for initiating and sustaining change along with main barriers and facilitating factors.

3.1 Literature Review

The relevant literature identified by the national experts in relation to structural change towards inclusive gender equality in R&I organisations is primarily focused on initiating and – especially – on sustaining and deepening change first and foremost within HEIs; secondly, in other public RPOs and RFOs and, finally, in private RPOs. The relative weight in the countries in these two topics (initiating vs. sustaining change) aligns with the legislative situation, described above. That is Ireland, Finland and Sweden have the most detailed, evidence-based research focusing on actions and concrete measures to redress the situation and, also, a relatively more detailed approach to gendered innovation, intersectionality and monitoring gender equality measures, whereas the Danish literature includes more grey reports on the current situation as well as the factors that impact the equality discourse in support of building an evidence and argumentation base.

Themes touched on in all four national contexts include sexism, masculinities, excellence, and meritocracy as ways to understand persistent inequalities, as well as the micro-dynamic 'doing' / 'undoing' gender – and how these impact structural practices and processes as well as the general equality discourse and public climate for structural change. As already mentioned,



however, there is a difference of where the main focus lies: 1) on aiming to *build* an evidence-and argument base (raise awareness) – and thus preparing or priming a ground for initiating change to a higher degree than sustaining and deepening (Denmark). Or 2), in contrast, on *cracking on with it:* In Sweden and Finland through evaluation of implemented practices and high(er) degrees of institutionalisation / mainstreaming, and in Ireland with systematic commitment, accountability and action. Evident in the selection from all four countries is concern regarding far-right politics, anti-gender and antifeminist discourse, neosexism, postfeminism, managerialism, and corporatism.

Also, in the selection from all four countries, specific relevant themes are elaborated, most notably gender representation, recruitment, allocation of tasks and academic housekeeping, training (here especially unconscious bias and management) and allocation of resources for gender equality work. In the Swedish, Finnish and Irish literature, the topics of gender pay gap and education and a constellation of the workforce to implement the changes are examined. Across the board, there is a general call for systemic and structural approaches that entail comprehensive, simultaneous and multipronged address as well as multi-level (microdynamic, day-to-day management, organisational, sectoral political, national and international) and cross-sectoral involvement. Notably, this demand is more detailed, specific, and research-based in the literature of Sweden, Finland, and Ireland compared to that of Denmark. The Swedish and Finnish articles deal most comprehensively with practices and promises of gender mainstreaming, whereas the Irish deal with the impact of involving RFOs centrally to promote the implementation, continual monitoring and accountability of GEPs and GAPs at both institutional and national levels. Finnish and Irish articles examine the merit of aligning national and EU gender strategies for positive policy development.

Sexism and gender-based violence as contributing factors in maintaining the persistent gender inequality are central themes in all four national contexts. A corresponding call for differential, systematic and structural approaches to remedy these are seen to be integral to any change effort.

Intersectionality receives only little attention, and where it does, it is most differentially addressed in Swedish and Finnish literature. Moreover, in these cases it is about including ethnicity and disability perspectives in equality and diversity work through a detailed examination of the consequences of not doing so.

Implementing gendered innovations across the R&I sector also receives little attention, the one Danish article cited is about integrating a gender dimension in educational programmes and teaching. There is more attention in the Swedish, Finnish and Irish selection, and also including other types of organisations than HEIs, with a focus on cross-sectoral correspondences and alignment.

Monitoring gender equality is treated with a more detailed and differentiated, evidence-based focus in the Swedish, Finnish and Irish literature. Moreover, in Ireland there is a marked emphasis on state, multi-state and international-level monitoring. However, it is not completely clear whether this covers *inclusive* gender equality, and if so, which kind of inclusion is meant.

In summary, the North-West European country cluster has the most recent literature, in the form of reports and research analyses, on the topics in following order: most on sustaining



change, next on initiating change and monitoring, and finally on gendered innovation in R&I and intersectional approaches. As for type of organisations, the focus is primarily on HEIs, followed by (other) public RPOs, then RFOs and, finally, private RPOs. There is no attention to NGOs and other non-profit RPOs. These tendencies are summed up in table 3 (numbers refer to listed national literature, provided in the references):

Tabl	e 3. Selected lite	erature by coun	try, topic and ty	pe of R&I organ	isation
Topic	Research funding organisations	Higher education institutions	Other public research performing organisations	Private companies working on R&I	Non-profit research performing organisations
Initiating change	DK4 FI5 IE1 IE3	DK1 DK3 DK4 DK5 FI1	FI2 FI5 IE1 IE2 IE3	DK1 DK4 SE10 FI1 FI2 FI5	DK1 DK2 DK4 SE10 FI2
Sustaining and deepening change	DK4 SE4 SE12 FI5 FI6 IE1 IE3 IE4 IE7 IE8	DK1 DK3 DK4 DK5 DK6 DK7 DK8 SE1 SE2 SE3 SE4 SE5 SE6 SE7 SE8 SE9 SE11	SE12 FI1 FI2 FI3 FI4 FI5 FI6 FI7 IE1 IE2 IE3 IE4 IE5 IE6 IE8 IE9	DK1 DK4 DK6 DK7 DK8 SE4 SE10 SE12 FI1 FI2 FI5 FI6 IE9	DK1 DK2 DK4 SE4 SE10 FI2 FI6
Adopting an intersectional approach	FI5	SE5 FI1 FI4 FI5 IE10	FI5	FI1	
Implementing gendered innovations	SE13 SE14 FI5	DK3 SE2 SE3 SE5 SE9	SE13 SE14 FI2 FI5	SE13 SE14 FI2 FI5	SE14 Fl2
Monitoring inclusive gender equality	SE12 FI5 IE3 IE8 IE9	SE2 SE3 SE5 SE12 FI5	IE1 IE2 IE3 IE8 IE9	SE12 FI5 IE9	

The degree of sufficiency of the current knowledge base on structural change towards (inclusive) gender equality in R&I organisations for each of the five topics in the four countries is assessed by the national experts as outlined in the following table.



Ta	Table 4. Assessment of current knowledge in the country, by topic						
Country	Initiating change	Sustaining and deepening change	Adopting an intersectional approach	Implementing gendered innovations	Monitoring inclusive gender equality		
Denmark	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient		
Finland	Insufficient	Insufficient	Highly insufficient	Highly insufficient	Highly insufficient		
Ireland	Highly adequate	Highly adequate	Insufficient	Highly adequate	Highly adequate		
Sweden	Highly adequate	Highly adequate	Insufficient	Insufficient	Highly adequate		

This assessment is in general aligned with the findings of the literature review and also with the legislative and policy framework situation, see section 2 above.

3.2 Initiating change

The general degree of uptake of GEPs in the four countries is most pronounced in HEIs, most likely a result of the Horizon EU GEP-eligibility criterion. Of the four countries, Sweden has the most widespread and well-established use of GEPs or alternative instruments, a consequence of Sweden's long practice of gender mainstreaming. Also here, Ireland and Finland are well established in terms of GEP uptake, whereas Denmark clearly shows up as a national newcomer to working systematically with GE. A collected overview of the prevalence of GEPs in the five different types of organisations is given in Table 4.

Table 5. Degree of uptake of GEPs by type of R&I organisation							
Country	Research funding organisations	Higher education institutions	Other public research performing organisations	Private companies working on R&I	Non-profit research performing organisations		
Denmark	Some have GEPs	Most or many have GEPs	Some have GEPs	Some have GEPs	n.a.		
Finland	Some have GEPs	Some have GEPs	Some have GEPs	A few or none have GEPs	A few or none have GEPs		
Ireland	Some have GEPs	Most or many have GEPs	Most or many have GEPs	n.a.	Some have GEPs		
Sweden	Most or many have GEPs	Most or many have GEPs	Most or many have GEPs	Most or many have GEPs	n.a.		

This general development is also reflected in the five types of organisations in which the national experts consider to be relative newcomers regarding implementing GEPs. In Sweden, systematic gender equality instruments such as GEPs are well-established in all but NGOs, and there is accessible knowledge at hand. For Swedish NGOs, GEPs have not necessarily been seen as 'their' instrument for GE, and in contrast to larger public and private employers, NGOs have not seen the legal GEP requirement to be applicable to them. Finland shows the same situation for RFOs, HEIs, and other public RPOs, with well-established GEP practices. Private RPOs are seen as relative newcomers and, therefore, there is as of yet not widespread systematic planning and execution of GEPs. For NGOs there is -to the expert's knowledge- no



reliable information available. In Ireland, only HEIs have a well-established practice, whereas RFOs, other public RPOs and NGOs are assessed as relative newcomers since their GEPs – while in existence and with information about them accessible – are mostly from 2020 onwards. For private RPOs, there is - to the expert's knowledge - no reliable information available.

Newcomers in relation to implementing GEPs

In Denmark, both HEIs and RFOs are seen as relative newcomers and, for all other three types of organisations, there is - to the expert's knowledge - no reliable information available. This very clearly reflects Denmark's relative *general* newcomer situation to systematic gender equality instruments, in comparison with country cluster neighbours. This is perceived to be due to the widespread consensus, not least in the public debate, that Denmark is a frontrunner, and that affirmative action and quotas are counterproductive, which has resulted in hands-off legislation, letting it be up to individual institutions to define and implement measures and objectives, while obscuring systematic data and information. The implementation of the HEU GEP eligibility criterion came as a relative shock to most Danish R&I organisations.

Table 6. Type of organisations as 'newcomer' implementing GEPs							
Country	Research funding organisations	Higher education institutions	Other public research performing organisations	Private companies working on R&I	Non-profit research performing organisations		
Denmark	Yes	Yes	n.a.	n.a.	n.a.		
Finland	No	No	No	Yes	n.a.		
Ireland	Yes	No	Yes	n.a.	Yes		
Sweden	No	No	No	No	Yes		

The use of alternative instruments to GEPs is only found in Sweden, for RFOs with policy documents on gender equality in the distribution of funds and for HEIs where gender mainstreaming plans have replaced the former legal GEP requirement. This can be seen as a result of the longstanding and consistently developed practice of systematic and institutional gender equality work in Sweden. For the other three countries, where there is (reliable) information available, alternative instruments are not widespread.

Table 7. Use of alternative instruments to GEPs						
Country Research funding organisations organisations Other public research performing organisations Other public research performing organisations Other public research performing organisations						
Denmark	No	No	No	No	No	
Finland	No	No	No	n.a	n.a	
Ireland	No	No	No	No	No	
Sweden	Yes	Yes	No	n.a	n.a	



Main barriers and facilitators for initiating change

Barriers and facilitators for initiating change vary in the four countries, being closely linked with prevailing national situations, history, as well as the general public discourse. Thus, in Denmark, the publicly vocalised neosexist and postfeminist standpoints combine with a widespread understanding that gender equality equals quotas and affirmative action, the lack of systematic data and knowledge, and a general absence of experts to make a strong *general* barrier to initiating change for gender equality. In terms of facilitators, EU and national legal requirements are important, as are international and sector-wise competition and demonstrable positive effects of implemented measures. Other facilitating factors are the recent (2020) #metoo movement and other bottom-up demands such as employees' demands for parental leave. Finally, possibly as a consequence of the Danish hands-off approach, leaving it up to single institutions to implement gender equality measures, the support and endorsement of top management is crucial. These factors apply to all five types of organisations.

Sweden, in contrast, has generally moved beyond the initiating stage, and therefore resistance or barriers are more localised and not as sweeping as in Denmark. Thus, barriers are to be found in traditionally male-dominated fields and sectors - such as traditional Swedish base industries (mining, steel, wood and machines) and the IT sector with its brand of masculine culture - where lack of understanding of the problem and resistance may be found, as well as in political NGOs, whose ideology - or that of their financers - as in favour or opposition of gender equality may play a decisive part. Here the rising anti-feminist public discourse may also play a larger role than in the other types of organisations. Also, NGOs and other non-profit RPOs may have an understanding that gender equality requirements do not apply to them, making it more crucial how leadership and staff engage with and around questions concerning GE. For NGOs that research social/societal questions, gender equality is often a given, whereas for NGOs to the right of the political spectrum that research economy and innovation, gender equality may be positive as the idea of the importance of using the female talent reserve is strong in Sweden. General facilitating factors include a generally positive societal discourse concerning equality and requirements from governments. For RFOs, the discourse concerning the loss of female talents is also a factor. For public and private RPOs, female networks and supportive top management are important, as are requirements from funders.

In Finland, the situation is also differentiated, reflecting the relatively advanced stage of gender equality implementation: For RFOs, barriers include unsupportive top management and the absence of gender equality experts, and facilitators include a strong gender equality movement and EU pressure. For HEIs, the main barriers count uncommitted top management, general resistance towards gender equality and lack of gender audit. Facilitating factors include strong pressure from the ministries that fund HEIs and the presence of GE experts. For other public RPOs, the main barriers include unsupportive top management and the absence of gender equality experts, and facilitating factors involve strong gender equality movements and stakeholder pressure towards GE. For private RPOs, barriers include inadequate expertise and lack of motivation – the latter also applies to NGOs and other non-profit RPOs –, along with weak engagement and a lack of perceived importance regarding GE. For both types of organisations, facilitating factors include stakeholder pressure towards gender equality and a strong legal framework.



Ireland, with its singular success in defining, raising awareness and implementing systematic measures and instruments at all organisational and political levels positions the main barrier across all five types of organisations to be lack of recurrent funding and the main facilitating factor to be national policy framework.

3.3 Sustaining Change

As described in detail above, sustained change is well advanced in the North West country cluster, especially in Finland, Sweden and Ireland.

Main barriers and facilitators for sustaining change

In terms of sustaining change, the main barriers and facilitators extend what we see in terms of *initiating* change. In the most advanced countries, especially Sweden and Finland, more differentiated and specific barriers and facilitators across the types of organisations could be identified. Although, it may be argued that differences in reporting are due to personal observations and the style of the national experts. Nonetheless, there is reason to believe that the detailed Swedish responses would also be partially or wholly applicable in other national contexts.

In Denmark, in addition to those mentioned in the previous section, barriers to sustaining change across all five types of organisation include the non-existent policy framework for the R&I sector, a general absence of gender equality experts, lack of systematic data and knowledge, weak gender equality movements, as well as in-house resistance both from top-management and from structures and procedures. Facilitating factors are the same as for initiating change, but here the beginning of a positive development in gender equality awareness, expertise and capacity base is promising.

In Sweden, barriers to sustaining change in RFOs include academic ideals and traditions forming biases – both conscious and unconscious – that appear in the peer review process when evaluating applications. This presents difficulties in counteracting the effects of inequalities in women's and men's academic careers, as funding decisions need to be genderneutral. Facilitating factors include an awareness in several funding organisations and a will to do something about the problem, such as observation of funding decision meetings; efforts to evaluate postdoc mobility demands in different ways and continuous monitoring of gender distribution of funding. It is also a facilitating factor that public financers have an obligation to consider gender equality in their funding decisions. For HEIs, barriers consist of gender fatigue and an increasingly polarised public discourse and resistance to gender equality becoming more outspoken. Changes of key persons always constitute a potential threat. Finally, more and more stable funding is required. The continuous requirements from the relevant ministry, e.g., Gender mainstreaming and gender distribution among professors, is a main facilitator for HEIs along with support for gender mainstreaming both in terms of funds but also – and more crucially - by the organisation of network events and meetings, handled by the Swedish Gender Equality Agency. For other public RPOs, the fact that gender equality may not be a focus area constitutes a barrier. This produces a dependence on the interest and mobilisation of individuals in key positions, such as leaders, even more critical with a lack of stability and continuity as a potential consequence. Counteracting facilitators include the prevailing tradition



of gender equality plans and the Horizon EU GEP requirement. For private RPOs, dependence on the interest and mobilisation of single persons in key positions such as leaders is also a critical barrier. In Sweden, however, gender equality is (still) politically correct, especially as the importance of not losing female talent is stressed by several industrial R&I organisations. This is a facilitating factor. As it is the number of women in leadership roles. For NGOs and other non-profit RPOs, the situation is similar to the private R&I organisations, taking account of what was listed in the section above on initiating change. Where dependence on single persons' interests and mobilisation are one of the main driving factors, this may prove to be a barrier when people change or interests shift. Conversely, if there is an ideological basis in favour of gender equality, this may facilitate a sustained focus on change and there may not be as strong a susceptibility or dependence on prevailing interests, agendas or ability to mobilise.

In Finland, the strongest barriers to sustaining change towards gender equality are a lack of commitment from top management and the postfeminist belief that gender equality is achieved already, resulting in resistance and a lack of acknowledgement of the current relevance of GE. This is the same for all types of organisations except, NGOs and other non-profit RPOs, where lack of resources and expertise on gender equality work constitute the main barriers to sustaining change work. Facilitating factors are more differentiated: for RFOs and public RPOs facilitating factors include EU-legislation and the existence and promotion of positive examples, as well as the strong policy framework and incentives for promoting GE. For HEIs, it is a strong facilitator when funders undertake thorough evaluation and assessment of GE work and progress. For private RPOs, the strongest facilitator is building a business case and finding new ways to promote GE. For NGOs and other non-profit RPOs, working with gender audits facilitates sustained change.

Main stakeholders for and against structural change

The experts cite the following important stakeholders for and against structural change towards inclusive gender equality in R&I organisations in the four countries:

In Denmark, policymakers and anti-feminist mobilisation have been identified as the main opponents of change, while feminist social movements and international collaborators as the main proponents, across all five types of organisations.

In Sweden, internal positive GE ambassadors, such as GE officers, management, students, and staff at different levels are the main supporters of structural change. For private RPOs, female networks in and between companies also work positively for structural change. Important stakeholders for structural change for HEIs are the Ministry of Education and Research and the Swedish Gender Equality Agency, which supports and monitors changes. Stakeholders against structural change include mainly external actors, largely those who express their dissatisfaction about the 'contamination' of research by gender equality considerations in the media. Specific opponents to structural change in RFOs count peer reviewers used in the evaluation processes and some private funders may also have internal resistance. For NGOs and other non-profit RPOs, leadership support may vary according to their or their customers' ideological standpoints.



In Finland, policymakers and gender practitioners are the main supporters of structural change across all types of organisations. For RFOs and public RPOs, gender researchers are particularly important as are gender enthusiasts in general for HEIs (in addition to students) and for NGOs and other non-profit RPOs. Main opponents are top and middle management across all five types of organisations as well as employees and administrative staff especially concerning private RPOs, male professors at HEIs and social anti-gender movements for NGOs and other non-profit RPOs.

In Ireland, the following highly influential stakeholders were identified as supporters of change: The Centres for Women's /Gender Studies in Irish HEIs, from 1990 onwards; The Trinity Centre for Gender Equality and Leadership, TCGEL from 2017, which facilitated individual and institutional pressure and lobbying; moreover, three EU FP7 projects were identified as catalysers of change: INTEGER in Trinity College Dublin (TCD), FESTA in University of Limerick (UL) and GENOVATE in University College Cork (UCC). For RFOs, especially the Higher Education Authority (HEA) in underwriting government commitment to Athena SWAN to support and require HEIs to obtain Athena SWAN awards since 2013 and the fact that the political climate is very supportive of gender equality, intersectional perspectives of equality and LGBTQ+ groups. These are specific and very conducive examples of facilitating actors for the singular development in Ireland. As stakeholders against structural change, ageing male professors and women in 'gatekeeper' roles were identified and a lack of recurrent and targeted funding for gender equality / EDI is a main barrier. These can be seen to be both, specific for the Irish case and also general for all contexts.

3.4 Intersectionality

In general, and also evident in this country cluster, intersectionality as an applied discipline is still in the early stages of development with knowledge, methodology, understanding and practical application at the very initial stages. There are signs that there is a necessity for a more differentiated approach to gender and other grounds for discrimination, as well as where these intersect. However, there is still a huge gap between this burgeoning recognition among policymakers and some leaders to the actual application and widespread practice. The knowledge is still scarce, and good practice examples are far too few and not yet convincing. One problem (some places used as an excuse) is connected to dilemmas in obtaining, storing and using relevant data.

Of the four countries, Ireland has the most explicit, systematised, implemented and executed approach to intersectionality in the academic sector, yet even here, this is only at the initial stage with a largely additive approach, but with a defined objective of laying the foundation for a more integrated and truly intersectional approach. Ireland has made significant advances in addressing race as one intersecting categorisation with potentially big implications for organisational change, promising practices for data collection and integrating the communities in question as expert stakeholders in defining questions and (organisational) responses.

While not as explicit, defined and sector-specific as in Ireland, Sweden and Finland have longstanding practices of detailed application of non-discrimination measures, however, intersectionality is still largely seen as a question of discrimination and thus treated as a matter of equal opportunity and, even if equal opportunities consultants / officers at universities -in for instance Sweden-, have long been coordinating their work, it is as of yet not wholly integrated



with gender mainstreaming and not anywhere close to a fully integrated understanding of the organisational and structural (change) implications of equality work. Where practiced, it is still only restricted to one ground for discrimination in combination with gender, and not as more categorisations intersect. Finland is in general still a distinctly homogenous society, and the value of an intersectional approach is not understood widely or comprehensively. Denmark, in alignment with its general regard for equality issues, lags well behind the other three countries in this area and has barely begun to consider how equality dimensions intersect.

Main barriers and facilitators for adopting an intersectional approach

Across the four countries, the largest cited common barrier to adopting an intersectional approach is lack of knowledge, data, terminology, expertise and resources for understanding intersectionality in practical terms.

In Denmark, in addition to those mentioned in the previous two sections, barriers to adopting an intersectional approach across all five types of organisations include a general reluctance and insecurity about how to address intersectionality without unintended implications. Likewise for facilitating factors: in addition to the ones mentioned in the previous two sections, positive practical examples are essential.

In Sweden, the main barriers across the five types of organisations are lack of knowledge or interest and lack of a societal discussion and demand to spark interest. For HEIs, there is somewhat more knowledge. Facilitating factors include researchers who do relevant societal research, especially where this research is on grounds for discrimination including gender in the institutions who may in turn increase knowledge and awareness. This applies especially to HEIs and public RPOs. For RFOs facilitating factors are all but non-existent. Potential such factors could be influential people with an interest in and knowledge about intersectional approaches. One example of an initial change is the largest public funders, FORTE (which funds health, welfare and working life), which includes gender in the evaluation of research proposals that deal with age, ethnicity and ability. For private RPOs, NGOs and other non-profit RPOs, support for social innovation may prove to facilitate spreading of the intersectional approach, by increasing awareness of the user perspective and thereby the insight that users are different.

In Finland, apart from lack of expertise and resources for understanding intersectionality, a barrier is that intersectional gender equality movements have not (yet) attained visibility and strength to boost urgency and knowledge. This applies across all types of organisations. The main facilitating factors are inclusive organisational cultures and, for RFOs and HEIs, diversity policies and specific measures to integrate gender and other equality policies – such as gender with first age, and then ethnic background, in order to attract immigrant workforce – are promising practices.

In Ireland, the main barriers across the five types of organisations include lack of intersectional data, terminology and recurrent funding. The main facilitators are the national policy framework.



3.5 Gendered innovations

This aspect addresses whether there has been any relevant advance regarding gendered innovations in the R&I private companies. Gendered innovations, however, is still a largely underexposed concept, and is still in several instances understood primarily as a matter of promoting an increased gender-balanced participation in the private sector and innovative and technological disciplines and enterprises. In Finland, under this heading, initiatives were found that address gender representation to counter discipline-specific homosociality in recruitment, career progression and increase gender balance; moreover, some initiatives adopt gendersensitive and inclusive practices in R&D and innovation processes, as a way to improve technology through diversity, inclusion and equality, however, this mainly address a perspective of *who* is involved in research and innovation activities, rather than *what and how*. Examples are company-sponsored initiatives and programmes for inducting and raising interest among women and girls in IT, programming and gaming industries. Several good examples from Finland are listed: Girls in Tech, Mimmit Koodaa programme organised by Software Finland, and the non-profit organisation We in Games Finland.

In the same vein, in Ireland the '30% Club' initiative and similar private sector initiatives that seek via targets to increase women on boards of companies and in positions of decision-making (hence the name – 30%) were identified. Furthermore, Maynooth University EDI initiatives seek to build alliances between HEI and private companies with a view to promote gender equality, diversity and inclusion. A promising advance, driven by government requirement, is for companies to declare their gender pay gap.

A second understanding of this topic more in alignment with the definition of gendered innovations and sex and gender analysis, namely the integration of gender (and other equality) dimension into the research and innovation activities themselves, results in other types of initiatives and measures. In Sweden, the most advanced practices and policy development were identified, but as there is no overall information about actual advancements in the gendering of innovations in single companies, it is difficult to know if these policies have been implemented in practice. The traditional Swedish base industries, mining, steel and wood, are complemented by health technologies where gender perspectives are vital. The collaboration organisation for Swedish medical R&I companies (Lif) has some positioning documents on gender on their homepage. Also, the strategic innovation program, in medical technology, Medtech4Health, supported by Vinnova (Swedish Innovation agency), pays attention to the importance of equality in creating medical technology, and has published a handbook on how to integrate gender in medical technology. How much of this actually spreads to activities of the partaking companies is hard to say. Vinnova's program "Challenge driven innovation", with several different projects in collaboration with public research institutions and private industries, is an example of promoting gender aspects, but an evaluation by Ramboll finds that much could be improved. Vinnova is also the driver when it comes to SME's: getting funding from their specific investment in SMEs (enterprise cheques), requires that possible gender aspects in innovation are considered. There is evidence of growing awareness of the importance of these aspects: for example, 60% of the proposals that Vinnova received in 2022 acknowledged that gender was relevant in their area, however, gender aspects are often not dealt with in the practical work. In summary, awareness is rising in different institutions and organisations, but practice is lagging well behind.



In Denmark, gendered innovations in the private R&I sector are deemed to be largely nonexistent, unless the company deals explicitly or exclusively with biological sex and gender topics, for instance, GynZone which specialises in developing and delivering evidence-based e-learning for obstetric specialist professionals and care-personnel. However, there might be a beginning trend to integrate sex- and gender analysis: Lego launched a no-pink theme series 'Women of NASA' to promote a wider range of role models in 2017. In general, gender equality is in a Danish context mainly addressed as questions of representation, gender balance, and mitigation of bias in selection, evaluation and decision-making procedures. RFOs, which are important drivers in setting agendas in both the public and private R&I sector, have primarily been preoccupied with fixing numbers and secondarily with shifting culture regarding excellence criteria to be more inclusive, embracing evaluation procedures to match. Awareness of what gendered innovation entails is only at the very initial stage, with maybe the very first concerted enquiries in this regard in a conference, hosted by Danish Universities, on 'Gender Dimension in Research'. The conference took place at the time of writing this report, integrating the gender dimension in research was addressed with examples of projects that apply gender and sex analysis, such as Health Science, some Al projects, digital historical cultural heritage exhibitions and a science innovation incubator that funds biomedical enterprises and which currently is undertaking a systematic mapping of the (non-)existence of research projects that integrate the gender dimension (n)or address issues related to female biology issues. The conference addressed the consequences of the lack of attention to GE in innovation with an open discussion of the possibility of taking this perspective between major Danish public and private funders, however, it was evident at this conference that a detailed and widespread understanding of gendered innovations is still a thing of the future - and this also goes for the top levels of public and private funders.

Overall, the twofold interpretation of the underlying question of what *gendered innovation* along with *sex and gender analysis* for this section therefore seems symptomatic: gender and equality are still seen to be primarily a question of the workforce, representation, access and opportunity. Thus, the specific examples given for the Finnish and Irish contexts have counterparts in other countries and are fairly widespread.

In contrast, a precise, differentiated and applicable understanding and knowledge base about what gendered innovation is and entails is still a matter for education, awareness raising and capacity building, and there is, therefore, widespread confusion about what is meant by 'gendered innovation'. Reflecting this – and symptomatic – is a general lack of systematic advancement in implementing, reporting and documenting gendered innovation initiatives and practices in the private sector, RFOs and HEIs.

3.6 Data monitoring

The data collection and monitoring of gender equality is a crucial aspect for understanding progress and for identifying potential facilitators and barriers. All four countries collect data, but Ireland and Sweden have the most longstanding and comprehensive collection as well as monitoring practices. Ireland's exacting Athena SWAN requirements ensure cross-institutional benchmarking. Since 2020, Ireland also systematically requires race/ethnicity data. And Sweden has a long history of similar if not quite as exacting practices and cross-institutional benchmarking, also in terms of data concerning other grounds for discrimination. However, a



new (heavily criticised) national ethical vetting of research projects discourages collecting data on disability, ethnicity etc. – also in research related to R&I organisations.

In Finland and Denmark, the focus is mainly on a collection of gender data in connection with GEPs – and here, Finland has a much longer history than Denmark. But this is without much national systematicity and virtually no requirement or practice of follow-up, analysis or evaluation. Neither Finland nor Denmark include data on other social categorisations in their data collection or statistics.

In addition, Sweden, Finland and Denmark cite additional ad hoc analyses performed at the national level, such as the 2021 National Swedish Survey on Gender-Based Violence and harassment in Academia, Statistics produced by Statistics Finland and specific issues enlightened through one-off analyses produced by Danish funding agencies, such as gender aspects of funding, gendered aspects of career progression etc. These one-off studies and analyses, however, do not facilitate systematic benchmarking or progressive tracking of development.

4 R&I Organisations

R&I organisations are in general well represented in the four countries, reflecting the high prioritisation and funding of research, innovation, technology and development in this country cluster. All four countries have extensive public higher education sectors, covering comprehensive and mono-discipline universities and colleges, art schools and technical universities, all state-funded.

Table 8. Number of R&I organisations, by type				
Country	# HEIs	# Public RPOs	# R&I companies (estimation)	
Denmark	38	140	n/a	
Sweden	57	25	3.000	
Finland	38	44	7.038	
Ireland	18	23	n/a	

5 Engaged stakeholders

Regarding stakeholder interest in the five topics, there is generally a high level of interest and engagement across the board, with national specificities concerning advancement and level of development and differentiation. Thus, Denmark has a general interest in initiating and sustaining change as well as in monitoring, particularly for RFOs and RPOs. Sweden's primary emphasis is on sustaining change with monitoring coming second, Finland with initiating and sustaining change and Ireland displaying all-round interest across the board. Interest and engagement in the topics of gendered innovation and adopting an intersectional approach do figure, but more sporadically.



Specialised consultancies for all topics exist in Sweden, Finland and Ireland, whereas Denmark only identified specialised consultancies for initiating and sustaining change and adopting an intersectional approach.

5.1 Policymakers

Policymakers in the northwest country cluster indicate a solid interest in initiating and sustaining change, followed by monitoring, and last by gendered innovation and intersectional approaches. Ireland and Finland have the most consistent across all five topics, in Sweden the focus is on sustaining change and only little interest in initiating change, gendered innovation and monitoring and no interest at all in adopting intersectional approaches. Denmark, on the other hand, presents more interest in monitoring and some in an intersectional approach.

Table 9. Overview of policy makers' indication of interest					
Policy makers	Initiating change	Sustaining and Deepening Change	Adopting an Intersectional Approach	Gendered Innovations	Monitoring Inclusive Gender Equality
Denmark (n=3)	2	2	1	1	3
Sweden (n=3)	1	3	-	1	1
Finland (n=3)	3	3	2	2	2
Ireland (n=1)	1	1	1	1	1
Total (n=10)	7	9	4	5	7

Note: N and n indicate the number of policy makers identified. Policy makers can be interested in more than one topic. Numbers by topic indicate the number of identified policy makers interested in this topic.

5.2 Research Funding Organisations

Danish RFOs are mainly interested in initiating and sustaining change and in monitoring supplemented with one stakeholder's interest in adopting an intersectional approach. This picture is almost identical to the Finnish RFO interest, but instead of intersectionality interest, one stakeholder shows interest in gendered innovations. Swedish and Irish RFOs are primarily interested in monitoring, with the Swedish RFOs also showing interest in gendered innovations and sustaining change and least in intersectional approaches and initiating change. Only one Irish RFO is interested across the board.

Table 10. Overview of RFO's indication of interest					
RFOs	Initiating Change	Sustaining and Deepening Change	Adopting an Intersectional Approach	Gendered Innovations	Monitoring Inclusive Gender Equality
Denmark (n=3)	3	3	1	-	3
Sweden (n=3)	1	2	1	2	2
Finland (n=3)	3	3	-	1	2
Ireland (n=3)	1	1	1	1	3
Total (n=12)	8	9	3	4	10



Note: N and n indicate the number of RFOs identified. RFOs can be interested in more than one topic. Numbers by topic indicate the number of identified RFOs interested in this topic.

5.3 Research Performing Organisations

For RPOs, Danish and Irish RPOs indicate interest in all five topics, but this may not necessarily reflect that they are equally proficient in all areas. In Ireland, this also reflects proficiency and practical advancement, whereas in Denmark this reflects RPOs' recognition that all areas are relevant to inclusive gender equality efforts, even if the level of practical implementation is yet not developed. Sweden and Finland show more differentiated approaches, where the Swedish RPOs emphasise sustaining change and monitoring inclusive GE, and the Finnish RPOs emphasise initiating and sustaining change as well as gendered innovations.

Table 11. Overview of RPO's indication of interest					
RPOs	Initiating Change	Sustaining and Deepening Change	Adopting an Intersectional Approach	Gendered Innovations	Monitoring Inclusive Gender Equality
Denmark (n=2)	2	2	2	2	2
Sweden (n=3)	1	3	1	1	3
Finland (n=3)	2	2	1	2	1
Ireland (n=3)	3	3	3	3	3
Total (n=11)	8	10	7	8	9

Note: N and n indicate the number of RPOs identified. RPOs can be interested in more than one topic. Numbers by topic indicate the number of identified RPOs interested in this topic.

5.4 Communities of Practice

The four countries have highly engaged existing networks and / or associations, some of which are centrally placed and affiliated with strong organisations with a considerable reach of influence. These indicate interest and engagement across all five topics, with an overall emphasis on sustaining and initiating change and somewhat less on the other three topics.

Table 12. Overv	view of existi	ng networks' a	and/or associati	ons' indicatior	n of interest
Networks and/or associations	Initiating Change	Sustaining and Deepening Change	Adopting an Intersectional Approach	Gendered Innovations	Monitoring Inclusive Gender Equality
DK (n=3)	3	3	2	2	2
SE (n=3)	1	3	1	-	1
FI (n=3)	3	2	1	2	1
IE (n=1*)	1	1	1	1	1
Total (n=10)	8	9	5	5	5



Note: N and n indicate the number of existing networks and/or associations identified. Networks and associations can be interested in more than one topic. Numbers by topic indicate the number of identified CoPs interested in this topic.

* Ireland has indicated two additional influential associations that have contributed to driving and supporting the national gender equality agenda, however, these extend beyond what can easily be termed CoPs, and therefore indications of interest in these two have been omitted.

Suggestions to support Communities of Practice

The national experts indicate two types of suggestions: potential or existing CoPs that may benefit from targeted support and themes that may enhance and build capacity in these CoPs. Regarding CoPs that may benefit, the Swedish, Finnish and Irish responses indicate only national CoPs, some existing and well-established GE practitioner and women's or feminist associations, e.g., student organisations (Sweden, Ireland, Finland); some existing networks that from the outset do not have gender equality as a theme, e.g., funding and innovation officers' associations (Sweden); some potential CoPs that could boost the ongoing efforts, such as a CoP in the forestry industry (Sweden); subgroups to existing GE practitioner networks around specific themes (Sweden, Ireland); or networks for men to become engaged in gender equality work (Finland); and networks around specific themes, e.g., practising intersectionality through integrating immigrant women; multidisciplinary work to enhance gendered innovations across different fields, and monitoring and assessment.

The Danish response, in contrast, includes both national and transnational CoPs, such as prior project consortia, or potential Scandinavian / Nordic gender equality practitioner network. Here, however, suggestions for themes are not further specified.

Themes suggested by the Swedish national expert are very specific, except for initiating change (as this is already well underway in most areas), matching differentiated needs and pairing with specific ideas for networks that may benefit. For sustaining and deepening change, this includes Gender in forestry, where ongoing and longstanding efforts so far still show meagre results. Potential CoPs could be representatives of the forestry companies with the support of the Swedish University of Agricultural Sciences. For adopting an intersectional approach, this includes intersectionality and gender+ in IT education - and here the targeted CoPs could be existing female students' associations that are an active and important factor in diversifying IT education and collaborate closely with (and are often financially supported by) their universities. The theme could be enhanced by broadening their experience of being a minority to include an increased understanding of other minorities' experiences. For gendered innovations, the theme could be to encourage increased knowledge and engagement of university innovation and funding support offices - targeting existing associations that are not organised around GE. Monitoring inclusive gender equality could be a follow-up or supplement to staff recruitment to include gender+ - and this could target for instance a subgroup of the existing Swedish HEI EDI officers who work intensively with recruitment.

The Finnish national expert proposes the themes of motivation and reasoning for gender equality work with initiating change. For sustaining and deepening change, identified themes are: tackling resistance and understanding and countering postfeminist thinking and including men into networks or establishing networks for men, to engage them in GE work. For adopting



an intersectional approach, themes such as integration of immigrant women in R&I, as well as targeting organisational networks that promote integration. For gendered innovations, multidisciplinary work to enhance innovations in different fields is an issue and here the indication is that there is great potential for multidisciplinary networks, that could take up this theme. For monitoring inclusive gender equality, themes could include data collection, monitoring, assessment, and evaluation, especially to ensure proper address of unethical behaviour. These themes are crucial for establishing a necessary network.

The Irish national expert indicates a need or use for the twinning of RPOs with and without experience of GEPs for all the topics except adopting an intersectional approach, which instead could be boosted with examples, experience and promising practices. The indicated network for all five topics is the existing national Advance HE Athena SWAN Ireland National Committee and Practitioner Network.

6. Training Resources

English training resources offered by the four national experts of the Northwest country cluster cover a range of topics, and most are research-based or produced/offered by different kinds of initiatives or projects. Topics include sexism and Gender-based Violence, resistance, GEP implementation, unconscious bias and stereotype-countering tools, recruitment, handling resistance, change management, inclusive leadership, and GEP / gender mainstreaming implementation, as well as gendered innovations. Also included are resources on fathers at work and a methodology for addressing gender inequality through structured conversations and social games.

	Table 13. Training resources in English				
Country	Title	Description	Link		
Denmark	Picture a Scientist	Picture a Scientist is a 2020 documentary highlighting gender inequality in science. The movie tells the stories of several prominent female researchers, and brings to light the barriers they encountered, including cases of discrimination and harassment	https://www.pictureascientist.com/		
Denmark	SPEAR virtual training materials	Virtual training materials on recruitment, GDiR, resistance and stakeholder engagement The material is output of the EU H2020-funded SPEAR project (Supporting and Implementing Plans for Gender Equality in Academia and Research)	https://gender- spear.eu/virtual-materials		
Denmark	On The Agenda: Mosaic®	Mosaic® uses common gender equity issues as a natural starting point to encourage participants to	https://ontheagenda.eu/mosaic/		



		discuss and reflect on the meaning and practice of inclusive leadership	
Denmark	SexismEDU	A website with useful resources and a handbook in English (the handbook is at the time of writing this under contract for publishing in both Danish and English) A podcast series, 'do you know sexism', supplementing the website and handbooks in both Danish and English is also available	https://sexismedu.dk/ https://www.spreaker.com/show/do-you-know-sexism
Denmark	Develop Diverse	Develop Diverse is the world's first software tool that automatically analyses stereotypic content for gender, age, and ethnicity in texts and proposes non-stereotypic alternatives.	https://www.developdiverse.c om/product/
Sweden	Implement Diversity works in different kinds of organizations, has also worked in the academic sector.	"We do seminars and workshops as well as offer advice on how organizations successfully can implement gender equality, diversity and inclusion in the workplace. We support our clients with education for management and employees, advice on how to assure the quality of the recruitment process from a diversity and inclusion perspective, develop policies, make compensation surveys, KPI's for gender equality and diversity, and support you in your work with the Active measures of the Discrimination Act. We do consultancy work in Sweden and globally."	https://implementdiversity.co m/english/
Finland	Fathers at work	by Emilia Kangas, Anna-Maija Lämsä & Suvi Heikkinen	https://www.youtube.com/wat ch?v=ayAKwblsog4
Ireland	SAGE: Creating a Gender Sensitive Institution	Course modules: - Change Management for Gender Equality - Unconscious Bias - The Gender Dimension in Research This course has been developed to provide valuable knowledge for those in higher education who wish to advance gender equality in their workplace, and to address gender imbalances in academia and research. It includes methods and strategies for promoting gender equality and aims to give you a solid understanding of how to create an increasingly gender sensitive organisation in your place of work.	https://www.tcd.ie/tcgel/international-projects/SAGE/creating_a_gender_sensitive_institution/



This course is an output of the SAGE (Systemic Action for Gender Equality) Horizon 2020 project.

Training resources in national languages include Ireland and Sweden the same as above (the Swedish resource is both in English and Swedish). Thus, three national language resources are listed from Denmark and Finland, including a guide on how to conduct a good conversation with a young person about gender sexuality and identity (Denmark), GenderLAB, a research-based lab combining Design Thinking and norm criticism to create innovative, concrete and sustainable solutions to complicated challenges and problems related to Gender Equality and cultural change (Denmark), and lastly a workshop on standard (GE) terminology developed and delivered by Malin Gustavsson (Finland).

Table 14. Training resources in national languages					
Country	Title	Description	Link		
Denmark	LGBT+ Danmark: Guide til den gode samtale om køn og seksualitet med en ung person	A guide about how to have a good conversation about gender, sexuality and identity with a young person.	https://lgbt.dk/guide-til- den-gode-samtale-om- koen-og-seksualitet- med-en-ung-person/		
Denmark	KVINFO: GenderLAB: Trivsel og bedre bundlinje,	GenderLAB is a laboratory that combines Design Thinking and norm criticism to create innovative, concrete and sustainable solutions to complicated challenges and problems related to Gender Equality and cultural change.	https://kvinfo.dk/genderl ab/		
Finland	Ota normiterminologia haltuun.	Get acquainted with standard terminology – a workshop given by Malin Gustavsson	https://www.youtube.co m/watch?v=wggMSiw02 6U		



7 Conclusions

The Northwest country cluster is characterised by considerable overall progress. Ireland and Sweden are well advanced with widespread uptake of systematic and comprehensive gender equality efforts, well well-developed, solid and comprehensive legal and policy frameworks. Particularly for the R&I and HE sectors, there are strong gender equality movements and leadership backing with supportive participatory democratic processes, promising advances in terms of data collection and monitoring and initial intersectional practices that are explicitly designed to be further developed. Finland is almost on the same level with solid legal and policy framework and widespread uptake of gender equality efforts and also has strong gender equality movements and political recognition, even if these efforts are not systematised or comprehensive to the same degree as Sweden and Ireland, in particular about data collection and monitoring. Denmark is the least advanced of the four, in several respects, not least reflected in the somewhat less comprehensive legal and policy framework, the recent GEP uptake (and only really as a response to the HEU GEP requirement), weakened democratic processes with low regard for expertise, widespread postfeminist and neo-sexist public discourse and strong counter-movements. Similar backsliding tendencies are also on the rise in Finland and Sweden.

Across the four countries, the emphasis is on initiating (except for Sweden) and sustaining and deepening change, with less on monitoring or adopting an intersectional approach. The two most underdeveloped topics are intersectional approaches and gendered innovation (in general) but in separate and distinct ways. Intersectionality is increasingly recognised as an important (new) area to integrate in order to achieve equality, diversity and inclusion, even if knowledge and examples are still scarce and the practice is imbued with insecurity and unclarity concerning ethical considerations. Irish and Swedish authorities, HEIs and some RFOs have taken initial steps to adopt intersectional approaches that in different ways may prove to be promising, but these are still at most gender and one other dimension and otherwise, where given due consideration, grounds for discrimination are primarily treated separately and not in combination (i.e., an additive approach). Legal and policy frameworks are overall inadequate and there is in general insufficient data, knowledge and hardly any practice examples. Furthermore, no real and practicable requirements are implemented (except to some degree in Ireland) and even where there is extensive legislation, practice is inadequate for the task, so it seems there is a fair share of 'fumbling in the dark'.

Gendered innovations, in contrast, are in many cases not even understood as a systematic endeavour to take gender and other specific social categorisations into account in research, education and innovation content (e.g., data, methodology, design, execution, impact) in order to qualify and ensure applicability to the entire demography. Instead, it is often misunderstood as an issue of representation and equal access, and while these are important equality aspects, this erroneous conceptualisation of gendered innovations hampers systematic knowledge generation, awareness and recognition of the importance of gendered innovation. This is reflected in the very scant engagement in this topic across the four countries – and again here Sweden and Ireland are most advanced, for instance through RFO requirements implemented. There may be signs that some sectors (e.g., IT and Health), and some private companies are beginning to orient themselves to these perspectives, and this is largely due to a bottom-up demand and ever-so-slowly growing public recognition, due to popular



dissemination and the wake of #metoo movements in Sweden, Finland and Denmark. The EU GEP requirement, matched with some Swedish and Irish RFO requirements, could initiate a systematic approach, fostering an evolving understanding, recognition, and practice.

Data collection and monitoring is likewise most advanced, systematic, comprehensive and embedded across the sectors in Ireland and Sweden, allowing for national and interinstitutional benchmarking and the growth of a body of knowledge to track and monitor progress. As already mentioned, both Sweden and Ireland are gradually including data on additional discrimination factors. In Sweden, ensuring cross-coordination between gender and equal opportunities within their organisation, and, in Ireland, including race/ethnicity data in mandatory data collection and monitoring. Finland has the longest trajectory in data collection. even so, this is indicated as being focused more on collection than on systematic monitoring. It is also the case in Denmark, where data collection has only really been systematically implemented in preparation for the HEU GEP requirement, but a growing recognition and burgeoning practice is currently under way. Neither Finland nor Denmark therefore boasts the possibility for benchmarking. Across the types of organisations, in all four countries, HEIs, closely followed by RFOs, have the most advanced data collection and monitoring and are most comprehensively documented and subject to legislation, while NGOs are least so. Public and private RPOs along with NGOs and other non-profit organisations are to a much larger degree diversified and legal frameworks are perceived as not applicable. In general, inclusive gender equality efforts would benefit greatly from advancing this topic - most in Denmark and Finland, but also in Ireland and Sweden. Thus, continuous efforts are required to address challenges, improve data collection, ensure data transparency and accessibility, set standards, foster inclusivity (e.g., by providing disaggregated data in different social categories), data monitoring and expand monitoring efforts to include a broader range of organisations within the R&I sector across countries.

As for the uptake of GEP – or, especially in the case of Sweden, equivalent measures – HEIs and RFOs in Ireland and Sweden are well advanced and can no longer be defined as newcomers. While Finland has strong feminist movements and longstanding gender equality traditions and practices and has made considerable advances, GEPs seem to be somewhat less advanced and comprehensively embedded in comparison with Sweden, and even if most HEIs and RFOs have GEPs (and have had so for a while), all other Finnish organisations are defined as relative newcomers to GEP-efforts. In Denmark, the implementation of GEPs in HEIs and other organisations is a direct result of the HEU GEP requirement, and thus all Danish types of organisations are newcomers to GEP-work – and much more pronounced than in any of the other three countries in the cluster. However, there is evidence of a surge in interest, understanding and engagement in the work from a growing body of practitioners in the sector. The prevalence of GEPs grows scarcer in public and private RPOs in all four countries and it is difficult to obtain information about the prevalence of GEPs in NGOs and other non-profit RPOs.

In conclusion, one of the most striking characteristics of the Northwest country cluster is the fact that even if this cluster counts some of the most comprehensively advanced contexts for gender equality efforts at all levels in the world – Ireland and Sweden – these advanced practices coexist with urgent and perpetual needs for promotion, argumentation, awareness raising, education, training, capacity building, definition and upholding of legislative and policy requirements, continuous focus and handling of implicit and explicit resistance and backsliding.



Even if this urgency and pressure here can seem less than in other contexts, and the road paved to some extent, it is still as real and pressing as in less advanced countries and contexts. One obvious conclusion from this is that advancement towards inclusive gender equality is not synonymous with a once-and-for-all elimination of the problem of inequality/ies. Instead, the spectrum between ignorance, blindness and resistance to inequality, on the one hand, and comprehensive and effective enlightened practices growing ever larger and more differentiated, on the other hand. This growth occurs alongside the development of a more nuanced and high-quality knowledge base and an increasingly competent group of engaged actors. Therefore, it is important to remain vigilant and aware, as the threat of backsliding always persists.



References

Reference		Language
McKinsey & Company (2018) Bridging the talent gap in Denmark. Insights from female representation in STEM https://innovationsfonden.dk/sites/default/files/2018-10/gender-diversity-in-denmark.pdf	DK1	EN
Boston Consulting group (2019) Wake Up Denmark!, Denmark Is Forfeiting the Value of Workplace Diversity https://www.genderdiversity.dk/wp-content/uploads/2019/01/Wake-Up-Denmark_tcm9-215573.pdf	DK2	EN
Danmarks Akkrediteringsinstitution (2020) Hvor kønt ser det ud https://akkr.dk/wp-content/filer/akkr/Til-web Hvor-k%C3%B8nt-ser-det-ud.pdf	DK3	DA
Danmarks Forsknings- og Innovationspolitiske Råd (2019)_Karrierer i Forskningen https://ufm.dk/publikationer/2019/DFiRr_karriereriforskningen.pdf	DK4	DA
Jddannelses- og Forskningsministeriet (2022), Mænd og Kvinder på de danske universiteter. Danmarks Talentbarometer https://ufm.dk/publikationer/2023/filer/maend-og-kvinder-pa-de-danske-universiteter-danmarks-talentbarometer-2022.pdf	DK5	DA
Einersen, Anna Franciska; Krøjer, Jo; MacLeod, Sorcha; Muhr, Sara Louise; Munar, Ana María; Myers, Eva Sophia; Plotnikof, Mie and Skewes, Lea (2021), SexismEDU https://sexismedu.dk/get-the-book/	DK6	EN
Skewes, L., Skewes, J.C., & Ryan, M.K. (2019). 'Attitudes to sexism and gender equality at a Danish University'. <i>Kvinder, Køn & Forskning</i> , 28(1-2), 71-85. https://doi.org/10.7146/kkf.v28i1-2.116118	DK7	EN
Skewes, L., Skewes, J.C., & Ryan, M.K. (2021). 'Attitudes to sexism and the #MeToo movement'. <i>NORA: Nordic Journal of Feminist and Gender Research</i> , 29(2), 124-139 https://doi.org/10.1080/08038740.2021.1884598	DK8	EN
Angervall, P., & Beach, D. (2020). 'Dividing academic work: gender and academic career at Swedish universities.' <i>Gender and Education</i> , 32(3), 347–362 https://doi.org/10.1080/09540253.2017.1401047	SE1	EN
Peterson, H., & Jordansson, B. (2022). 'Gender mainstreaming in Swedish aca-demia: translating policy into practice'. <i>Journal of Gender Studies</i> , 31(1), 87–100 https://doi.org/10.1080/09589236.2021.2004539	SE2	EN
Guidelines for Gender Mainstreaming in Academia'. (2016) Gothenburg: Swedish Secretariat for Gender Research https://eige.europa.eu/sites/default/files/sscr_guidelines-for-gender-mainstreaming-academia.pdf	SE3	EN
Fagerlind-Ståhl, A-K (2022) Med ljuset på jämställdhet – när osäkerheten överskuggar allt. Stockholm: Sveriges universitetslärare och forskare https://sulf.se/app/uploads/2022/02/I-ljuset-av-jamstalldhet_nar_osakerheten_overskuggar_allt_slutlig-1.pdf	SE4	SE
Jordansson, B., & Peterson, H. (2019). 'Jämställdhetsintegrering vid svenska universitet och högskolor. Det politiska uppdraget återspeglat i lärosätenas planer'. <i>Kvinder, Køn & Forskning</i> , 28(1-2), 58–70 https://doi.org/10.7146/kkf.v28i1-2.116117	SE5	SE
Jämställdhetsmyndigheten (2021) 'Informella hierarkier, könade praktiker och ojämlikhet i akademin' https://jamstalldhetsmyndigheten.se/aktuellt/publikationer/informella-hierarkier-konade-praktiker-och-ojamlikhet-i-akademin-2021-5/	SE6	SE
Martinsson, Lena (2022) 'Är akademisk frihet patriarkal? Antigenusmo- bilisering och akademisk frihet i en svensk kontext'. <i>Kulturella perspektiv</i> ,	SE7	SE



(31) https://publicera.kb.se/kp/article/view/1957		
Rudolfsson et al (2022) Enkätstudie om genusbaserad utsatthet och sexuella trakasserier i svensk högskolesektor. Karolinska Institutet https://ki.se/media/246914/download	SE8	SE
Jämställdhetsmyndigheten/Swedish Gender Equality Agency. 'Med siktet inställd på 2025. Delredovisning av jämställdhetsintegrering i högskolor och universitet' https://jamstalldhetsmyndigheten.se/media/scnf5jma/rapport-2023-9-delredovisning-av-jamstalldhetsintegrering-i-hogskolor-och-universitet-2023-04-19.pdf	SE9	SE
Ingenjörsvetenskapsakademin: 'FoU Barometer 2021' https://www.iva.se/globalassets/bilder/projekt/naringslivets-fou-investeringar/202108-iva-naringslivets-fou-investeringar-a5-m.pdf	SE10	SE
Martinsson, L., Griffin, G., & Giritli Nygren, K. (2016). <i>Challenging the myth of gender equality in Sweden</i> . Policy Press https://doi.org/10.1332/policypress/9781447325963.003.0010	SE11	EN
Sjöberg Forsberg, Karin (2022) <i>Lärande utvärdering av JIM+. Slutrapport.</i> Mirak Adviser https://jamstalldhetsmyndigheten.se/media/4kmes2br/slutrapport-larande-utvardering-jimplus-2022-09-20.pdf	SE12	SE
Vetenskapsrådet (2018) 'Uppföljning av Vetenskapsrådets implementering av köns- och genusperspektiv i forskningens innehåll' https://www.vr.se/analys/rapporter/vara-rapporter/2020-02-06-uppfoljning-av-vetenskapsradets-implementering-av-konsoch-genusperspektiv-i-forskningens-innehall.html	SE13	SE
Jonasson Tolv J. & Lööf J. (2021) 'Inkluderande innovation i Vinnväxtmiljöer'. Rise Rapport 2021:51 https://www.vr.se/analys/rapporter/vara-rapporter/2020-02-06-uppfoljning-av-vetenskapsradets-implementering-av-konsoch-genusperspektiv-i-forskningens-innehall.html	SE14	SE
Tanhua, Inkeri (2022). 'The gendering of technology education: minority ethnic students' experiences of a women-dominated vocational dental technology programme.' NORA-Nordic Journal of Feminist and Gender Research: 1-15 https://doi.org/10.1080/08038740.2022.2131908	FI1	EN
Vehviläinen, Marja, and Liekki Valaskivi (2022). 'Situated gender equality in regional research and innovation: Collaborative knowledge production.' Science and Public Policy 49, no. 4: 561–572 https://doi.org/10.1093/scipol/scac007	Fl2	EN
Pietilä, Maria, and Romulo Pinheiro (2021). 'Reaching for different ends through tenure track—institutional logics in university career systems.' Higher Education 81, no. 1: 1197–1213 https://doi.org/10.1007/s10734-020-00606-2	FI3	EN
Jousilahti, Julia, Tanhua Inkeri, Paavola Juha-Matti, Alanko Leena, Kinnunen Amanda, Louvrier Jonna, Husu Liisa, Levola Maria and Jenni Kilpi (2022). 'KOTAMO Report on the state of equality and diversity in Finnish higher education institutions.' Publications of the Ministry of Education and Culture, Finland 2022:36 http://urn.fi/URN:ISBN:978-952-263-765-9 .	FI4	FI
Ferguson, Lucy (2021). 'Analytical review: Structural change for gender equality in research and innovation.' Publications of the Ministry of Education and Culture 2021:4 http://urn.fi/URN:ISBN:978-952-263-880-9 .	FI5	EN
Griffin, Gabriele and Marja Vehviläinen (2021). 'The persistence of gender struggles in Nordic research and innovation'. <i>Feminist Encounters: A</i>	FI6	EN



Journal of Critical Studies in Culture and Politics 5.2, no. 27: 1–17 https://doi.org/10.20897/femenc/11165		
Korvajärvi, Päivi (2021). 'Doing/Undoing Gender in Research and Innovation— Practicing Downplaying and Doubt.' Feminist Encounters: A Journal of Critical Studies in Culture and Politics 5.2, no. 27: 1–14 https://doi.org/10.20897/femenc/11164	FI7	EN
Lund, Rebecca, Susan Meriläinen, and Janne Tienari (2019). 'New masculinities in universities? Discourses, ambivalence and potential change.' <i>Gender, Work & Organization</i> 26, no. 10: 1376–1397 https://urn.fi/URN:ISBN:978-952-263-880-9 .	FI8	EN
Drew, Eileen and Canavan, Siobhán, eds. (2021). <i>The Gender-sensitive University: A contradiction in terms?</i> London Routledge https://doi.org/10.4324/9781003001348	IE1	EN
Drew, Eileen and Bailey, Jemima (2021). 'Change management to initiate and accelerate gender equality'. In <i>The gender-sensitive university: A contradiction in terms?</i> Drew, Eileen and Canavan, Siobhán, eds, 124–139 London: Routledge	IE2	EN
Drew, Eileen (2022) "Navigating unChartered waters: anchoring Athena SWAN into Irish HEIs", <i>Journal of Gender Studies</i> , 13, (1), 23-35 https://doi.org/10.1080/09589236.2021.1923463	IE3	EN
Drew, Eileen and Bencivenga, Rita (2017), 'Gender in Horizon 2020: The case of gender equality plans' <i>AG AboutGender</i> , 6, (12), 326–355 https://doi.org/10.15167/2279-5057/AG2017.6.12.488	IE4	EN
Clavero, Sara and Galligan, Yvonne (2020). 'Analysing gender and institutional change in academia: evaluating the utility of feminist institutionalist approaches', <i>Journal of Higher Education Policy and Management</i> , 42, (6), 650-666 https://doi.org/10.1080/1360080X.2020.1733736	IE5	EN
Bencivenga, Rita and Drew, Eileen (2021). 'Promoting gender equality and structural change in academia through Gender Equality Plans: Harmonising EU and national initiatives', GENDER, Zeitschrift für Geschlecht, Kultur und Gesellschaft, 1, 27-42 https://doi.org/10.3224/gender.v13i1.03	IE6	EN
Doona, Annie (2021) 'Addressing gender inequality in academia: The role of Irish funding agencies', In <i>The gender-sensitive university: A contradiction in terms?</i> Drew, Eileen and Canavan, Siobhán, eds, 154-165, London: Routledge	IE7	EN
O'Connor, Pat and Gemma Irvine (2020) 'Multi-Level State Interventions and Gender Equality in Higher Education Institutions: The Irish Case', <i>Adm. Sci.</i> 1-21, 10, 98 https://doi.org/10.3390/admsci10040098	IE8	EN
Dunne, Julie, O'Reilly, Ayesha, O'Donoghue, Ashley and Kinahan, Mary (2022) 'A Review of Irish National Strategy for Gender Equality in Higher Education 2010–2021', In Francisco José García-Peñalvo, Alicia García-Holgado, Angeles Dominguez and Jimena Pascual, eds., Women in STEM in Higher Education Good Practices of Attraction, Access and Retainment in Higher Education, Springer, Singapore, 21-50 https://doi.org/10.1007/978-981-19-1552-9_2	IE9	EN
Kempny, Marta & Michael, Lucy (2021) Race Equality in The Higher Education Sector: Analysis Commissioned by The Higher Education Authority. https://hea.ie/assets/uploads/2021/10/HEA-Race-Equality-in-the-Higher-Education-Education-Authority-1.pdf	IE10	EN



Disclaimer

While INSPIRE is funded by the European Union, views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the European Research Executive Agency (REA) can be held responsible for them.



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101058537.



The work contained in this document is subjected to a Creative Commons license (https://creativecommons.org/licenses/by-nc-sa/4.0/).

Please visit https://www.inspirequality.eu