ENERGY SYSTEM TRANSITION THROUGH STAKEHOLDER ACTIVATION, EDUCATION AND SKILLS DEVELOPMENT

ENTRUST

Gender Inclusivity Dissemination Guidelines

Deliverable 8.1

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About the ENTRUST Project

ENTRUST is mapping Europe's energy system (key actors and their intersections, technologies, markets, policies, innovations) and aims to achieve an in-depth understanding of how human behaviour around energy is shaped by both technological systems and socio-demographic factors (especially gender, age and socio-economic status). New understandings of energy-related practices and an intersectional approach to the socio-demographic factors in energy use will be deployed to enhance stakeholder engagement in Europe's energy transition.

The role of gender will be illuminated by intersectional analyses of energy-related behaviour and attitudes towards energy technologies, which will assess how multiple identities and social positions combine to shape practices. These analyses will be integrated within a transitions management framework, which takes account of the complex meshing of human values and identities with technological systems. The third key paradigm informing the research is the concept of energy citizenship, with a key goal of ENTRUST being to enable individuals overcome barriers of gender, age and socio-economic status to become active participants in their own energy transitions.

Central to the project will be an in-depth engagement with five very different communities across Europe that will be invited to be co-designers of their own energy transition. The consortium brings a diverse array of expertise to bear in assisting and reflexively monitoring these communities as they work to transform their energy behaviours, generating innovative transition pathways and business models capable of being replicated elsewhere in Europe.

For more information see **http://www.entrust-h2020.eu**

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- Cleaner Production Promotion Unit (Coordinator)
- Institute for Social Science in 21st Century

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Executive Summary

One of the key ambitions of the Horizon 2020 framework programme for research and innovation is to achieve gender equality and gender mainstreaming in research. These guidelines provide a blueprint to achieve those ambitions in the ENTRUST project. Achieving gender inclusivity in dissemination activities requires consideration of how language practices, and the use of imagery, can enhance inclusion. Inclusive dissemination practices can enhance communication, encourage input and feedback from participants, and ensure full participation, by all stakeholders.

In order to develop gender inclusivity in dissemination activities, researchers must reflexively interrogate their own preconceptions of gender. They should take account of their own gender positions, and how their gender intersects with other sociocultural positions, and consider how these can impact on their own communication styles and practices. Gender inclusivity in both language use, and imagery, as well as in delivery, is key to ensuring that that the ambitions of the project can be achieved.

Key points on gender inclusivity:

- **Gender matters**—research and communication on research is enhanced by gender inclusivity.
- **Be reflexive**—our gender and social position shapes our worldview.
- Language **shapes** both our thinking and our research practice.
- Gender inclusivity **enhances** research outcomes.
- Be **gender inclusive** when selecting terms.
- **Masculine pronouns** should not be used to represent both women and men.
- Terms that **diminish** women—like “lady” or “girl” should be avoided.
- Reference should not be made to women’s [or men’s] **appearance** or **marital status**.
- Avoid **traditional concepts** such as “head of the household” which limit representation.
- Use **gender inclusive** job titles.
- Be **proactively gender inclusive**. Include images of women in active roles as researchers, *etc*. Aim for gender balance when portraying domestic situations.
- Do not use sexualised, or sexually explicit imagery.
- Models of **gamification** should be tested on **both** women and men.
- Attend to **gender dynamics** in a group setting. Participant engagement should be facilitated. Avoid practices that will alienate participants from engaging with the project.
- **Identify barriers** that may hinder full participation from all participants, and take steps to overcome them.
- Prior to disseminating any information the text should be **gender-proofed** to ensure that high standards are applied to the dissemination of content.

1 Introduction

These guidelines will inform both the content and approach to developing and ensuring gender inclusivity in dissemination activities with a view to engaging stakeholders, and promoting involvement in the ENTRUST project. The project dissemination activities will maximise gender-inclusivity by adhering to these guidelines, and ensuring that appropriate language and imagery are used. In this context it is important to note that dissemination is not a single activity, but is a crosscutting theme of the entire project: and gender inclusivity is a core commitment, and a required element, of this project. The following sections outline what gender is, why gender matters, and how gender inclusivity can be accomplished in dissemination activities. It should be noted that this is a live, working document and will be regularly updated based on feedback from researchers and stakeholders.

2 Background

2.1 What is Gender?

In order to achieve gender inclusivity in dissemination activities it is important to understand what gender is, and to understand the difference between sex and gender. Sex refers to the biological differences between women and men. Gender refers to the social differences between women and men. People are born with a particular biological sex; but gender is a social and cultural construction, and it develops in the individual through social processes. Gender is learned. The individual develops their gender and their gendered identity through social and personal interactions (Oakley 1972). The fact that gender is socially learned, rather than determined by biology, is demonstrated by the huge variation in gender roles across different cultures, and across time (Eagly & Wood 2013; Wood & Eagly 2002). Gender roles also vary within societies, where they intersect with age and socio-economic status as well as other sociocultural factors such as culture, ethnicity, and religion.

We can think of gender in terms of the personal attributes people are expected to have (aptitudes and characteristics) as well as the social roles (behaviours and responsibilities) to which people are expected to conform. Men are expected to display the traits of masculinity; women are expected to display the traits of femininity. But what the traits of masculinity and femininity entail varies across both time and cultures, as well as within particular cultures. Gender roles have changed considerably over recent decades as social norms regarding appropriate gender aptitudes and behaviours have changed. For example, while women still have primary responsibility for parenting, fathers have become increasingly more involved in active parenting. This social shift in parenting responsibilities is increasingly recognised across the EU. Maternity leave is already mandatory in the EU, and some European countries have now introduced paternity leave, with more countries expected to follow.

Gender is a significant factor in everyone's lives. Everyone has a gender, everyone is gendered on the basis of their biological bodies from the moment they are born, and gendering continues for the duration of the lifespan (Fausto-Sterling 2005; Fausto-Sterling et al. 2012a; Fausto-Sterling et al. 2012b). Gender is both a

social process and a personal experience; it can be understood as a dynamic interplay between self and social system, a complex intersection between biology and society.

People develop their gender identities [as women and men] throughout the course of their lives. Each person is born into a social world that already has a gendered set of norms and expectations to which they are expected to conform, based on their biological sex. From the moment of birth each individual experiences being gendered as either a boy or as a girl. Infants are described in gendered terms, treated differently, and encouraged to display the appropriate gender attributes associated with the biological body that they happen to be born with (Fine 2010). Considerable social pressure—from family, peers, and wider society—is brought to bear upon children as they grow up to conform to their socially sanctioned gender roles.

Everyone has a gender; however, not everyone's gender enactment conforms to social expectations. Men are expected to demonstrate "masculine" behaviours and women are expected to demonstrate "feminine" behaviours, and there are significant social sanctions against individuals who do not conform to social expectations about how they should behave as either men or women. Further, it should be understood that gender is not a binary. Describing women and men as "opposites" is in itself a social construction. Women and men are not "opposites". Both men and women display a range of behaviours and abilities that can be described as "masculine" or "feminine"—and it should be realised that the decision to label behaviours and abilities as masculine or feminine is a social one. Both men and women cry; both women and men can be aggressive; both men and women are emotional; both women and men are rational; both men and women are empathic; both women and men can do mathematics.

It should also be realised that the tendency to designate certain professions and employments as better suited to either women or men on the basis of supposedly innate biological differences is also socially determined and strongly intersects with social norms of appropriate masculine and feminine behaviours and attributes. Both men and women can be nurses; both women and men can be engineers; both men and women can be child-carers; both women and men can be physicists; both men and women can be social workers; both women and men can be scientists.

Gender extends beyond an individual's behaviours and attributes. Knowledge, environments, technologies and products are also gendered as masculine and feminine, and so their use is gendered also. It should be recognised that attributing gender to knowledge and technologies etc. is a social choice and is not determined by biological factors.

2.2 Gender and Society

The EU recognises that the position of women and men in society is not equal. The EU has developed strategies to achieve gender equality between women and men; however significant gender inequalities remain. These inequalities feature across all areas of life—in the domestic, educational, and employment arenas—and across the EU. Women still have primary responsibility for domestic duties such as housework,

and still have the primary responsibility for childcare, as well as the care of elderly family members and relations with disabilities. These responsibilities can have a significant impact on women's careers.

Women still earn less money than men (EC 2014). Women are under-represented in highly paid fields of work such as the STEM [science, technology, engineering and mathematics] sectors (EC 2013). And women are over-represented in poorly paid, part-time and insecure employment sectors such as the service industry (EC 2009). The professions where women are the majority of employees, for example nursing and teaching, attract considerably lower salaries in comparison to the STEM sectors (EC 2014). This disparity in pay is a reflection of social systems that gives disparate value to the social roles of women and men. Society places a low value on the professions that involve the "feminine" attributes of caring—despite the obvious need that society has for carers. This is reflected by the comparatively lower pay scales that these professions command. It is also true that while it is difficult for women to enter the STEM sectors, it can also be difficult for men to enter the "caring" professions. The under-representation of men in these professions may be, in part, due to the lower rates of pay making them less attractive to men; but it is also fair to say that men can face considerable opposition to entering these careers because of the social designation of them as "feminine". The imbalance of both sexes across a range of sectors is detrimental not only to those sectors themselves, but to society as a whole.

Women are grossly under-represented in positions of political, corporate and financial power. The under-representation of women in positions of power impacts not only on women's earnings, but also on the culture and structures of political, corporate, and financial institutions. Women find themselves at a remove from decision-making roles in both institutions and in the public sphere; it then follows that they can have only limited impact in spheres of significant power and influence. As a result the perspectives and insights that might be gained from incorporating the different life experiences that women can bring is largely absent—to the detriment of the institutions themselves, as well as to the women and men who work there.

As human beings we display a range of intelligences, capacities and abilities. The perception that any particular type of intelligence or ability is confined to one sex is mistaken, as is the perception that any particular type of intelligence is superior to another. These attributions of value are a reflection of gendered social systems, and the gendered division of social roles, rather than intrinsic worth. It should be understood that the under-representation of women in comparison to men in technical and scientific careers, or in positions of power and influence, is not due to women's lack of "rational intelligence", or ability. Nor is the dominance of women in the "caring" professions due to men's lack of "emotional intelligence", or the capacity for empathy or nurturing. The disparities in occupation between women and men are a reflection of how societies are organised—they are not due to the intrinsic qualities of men and women.

The Horizon 2020 framework programme for research and innovation (H2020) has as one of its central goals gender equality and gender mainstreaming in research. Although there are more women in the workforce than ever before, and the EU is actively engaged with facilitating women in entering into paid

employment, there are still significant issues to be overcome before we achieve full gender equality across all spheres.

2.3 The Gender Imbalance in Research

There is a significant gender imbalance in the arenas of science and research. Data is collected for the European Commission every three years to assess the participation levels of women across scientific[1] disciplines. The collected statistics and indicators below are drawn from *She Figures 2012: Gender in Research and Innovation* (EC 2013). In the three sectors reviewed—higher education, government and enterprise—and in nearly all EU countries studied, the proportion of male researchers exceeds that of female researchers. In 2009, in the EU-27, women in research remain a minority, accounting for only one third of researchers. However, it is noteworthy that there is a considerable disparity between the proportion of female researchers in the public sector (higher education/government) and the private sector. On average, women represent 40% of all researchers in the public sector, but only 19% of researchers in the private sector. It is apparent that proactive EU and government policies promoting gender equality in the member states have had a clear, positive, impact on the numbers of women employed in the higher education and government sectors. However there still remains a significant under-representation of women in research leadership roles across all sectors. For example, in the Higher Education sector, the proportion of women who are full professors is just 18% (EC 2012).

It is clear that institutional cultures and practices hinder career opportunities for women. Men dominate most of the sectors in the research arena; moreover, the culture and ethos in the sectors are dominated by norms that reflect ideals of stereotypical masculinity. There is pressure to display and adhere to traits of masculinity that demand displays of dominance, competitiveness, stoicism, single-mindedness and control. The demand to behave in ways that conform to norms of masculinity creates obvious difficulties for women, and creates barriers to their participation and progress in the arena. Perhaps less obviously, this culture also creates difficulties for men, as these demands are detrimental to many men too (Moss-Racusin et al. 2010). For those women who do manage to progress within the research arena, they are required to fit into the institutional culture and to adhere to the cultural norms of behaviour found there. As a result, they find it difficult, or may not be motivated, to offer a sufficient challenge to institutional norms and practices in order to bring about institutional change.

Organisational structures, cultures, processes, and practices are therefore hindering the advancement of gender equality in the research arena. There is a considerable problem with unacknowledged, and often unconscious, gender bias against women—particularly with regard to assessing the quality of their research (Addis 2010; Meulders et al. 2010). As a consequence of both direct and indirect discrimination, women are less likely to be hired; less likely to progress; and they are paid less for equal work.

The report from the Expert Group on Structural Change, *Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation* (European Commission

[1] In this content 'scientific' has a broad meaning encompassing all systematic research activities.

2012), identifies five sets of problems hindering the implementation of gender equality in research institutions:

1. Opaqueness in decision-making;
2. Institutional practices;
3. Unconscious gender bias — especially with regard to the assessment of excellence and the process of peer review;
4. Gender inequality generates wasted opportunities and cognitive errors in knowledge, technology and innovation. Research demonstrates that gender bias has negative implications for the content of science itself;
5. Employment policies and practices. A significant gender pay gap remains, as well as gendered work structures and practices that hamper the progress of women.

As the report points out, cognitive research demonstrates that despite commitments to fair practices and good intentions, both women and men display significant unconscious bias towards women, and both women and men are likely to undervalue women's accomplishments, and to give a lower rating to the quality of their work (*ibid*). This bias is evidenced across recruitment, performance evaluation, and advancement processes.

Peer review processes are supposedly designed to enhance excellence. However, "excellence" itself is a socially constructed concept. The concept of excellence and its connection to practice requires critical analysis. Objectivity is presumed, but in reality often lacking as gendered practices, contexts and cultures, and their effects, are unrecognised and unacknowledged. There is a considerable body of evidence demonstrating that there is a gender based double standard applied when assessing the quality of research and grant proposals, and in the provision of letters of recommendation (Foschi 2004; Madera et al. 2009; Marsh et al. 2009; Rees 2011; Wenneras & Wold 1997).

3 Gendering Research

3.1 Why the Imbalance Matters

The underrepresentation of women in research has been identified as a detrimental to innovation, and to achieving excellence in research outcomes. The European Commission has identified the need for structural change within research institutions in order to implement gender equality with a view to enhancing excellence and efficiency in research and innovation. Action for implementing gender equality has two aspects: the promotion of the equal participation of men and women in research activities, and the inclusion and integration of gender perspectives in research content. There is considerable evidence that gender discrimination has a deleterious effect on research outcomes; whereas implementing gender equality with regard to the researcher cohort, as well as giving full consideration to the gendered aspects and implications of these aspects in research project development and enactment, enhances the quality of research conduct and output (European Commission 2012).

There are some excellent resources that provide case studies that demonstrate how sex and gender analysis can enhance research, improve outcomes, and expand creativity in science and technology—a

number of examples of this are provided on the peer-reviewed website *Gendered Innovations: in Science, Health & Medicine, Engineering, and Environment*.[2] One of the case studies explored on the website concerns the incidence of heart disease. Ischemic heart disease (IHD) has been defined as primarily affecting men. As a result "evidence based" clinical standards have been based on male pathophysiology and outcomes. But IHD is also the main cause of death of U.S. and European women. Redefining the pathophysiology of IHD by analysing sex in the clinical research has identified the fact that women display different symptoms than men do and has led to new diagnostic techniques. This "gendered innovation" has led to a better understanding of heart disease in both women and men (Schiebinger et al. 2011–2013).

The capacity for communication within research sectors and between sectors is hindered by institutional cultures that valorise norms associated with hegemonic masculinity. It is often difficult to disseminate expert and technical information to a non-specialist audience; and these difficulties are exacerbated by the male-dominated culture of the research arena. Given the context outlined above, it is clear that the research sectors have to develop strategies that will help them to communicate effectively with non-specialists and the wider community. These strategies must encompass consideration being given to who is going to disseminate information; the manner in which it is disseminated; and the content of what is disseminated.

3.2 The Importance of Researcher Reflexivity

All researchers operate within an implicit paradigm, or belief system, based on the ontological, epistemological, and methodological assumptions that underpin their worldview (Guba and Lincon 1994). The researcher's implicit paradigm should be adequately interrogated as part of a sound reflexive approach to research.

All human beings, including researchers, whether or not we realise it, have ontological and epistemological concepts that we bring to our understanding of existence and knowledge. It is important for an adequate reflexivity that the researcher recognises just what those concepts are, and what implications they have for our research.

According to the Oxford English Dictionary [OED], ontology is the "science or study of being … concerned with the nature or essence of being or existence." Questions about the nature of reality, and the nature of human beings, are longstanding areas of thought and debate. Claims about gender, such as that it is innate; that it is determined by biology; that it is socially constructed; that it is fluid; (amongst others) are all ontological claims about the nature of human beings. Epistemology is defined as the "theory of knowledge and understanding, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion" (OED). Epistemology is concerned with the nature, grounds and limits of knowledge, and the possibilities for knowledge and knowledge claims. The question of the possibility of an objective "knower" and the possibility for "objective" knowledge of the world have been subject to sustained critique.

[2] Available at: http://ec. europa.eu/research/science-society/gendered-innovations/index_en.cfm and: http://genderedinnovations.stanford.edu

Unexamined ontological and epistemological assumptions about gender pervade social and scientific research. Ontological assumptions of, and binary distinctions between, categories of persons and their attributes are often unreflexively accepted across the sciences, such as man/woman and masculinity/femininity, and these distinctions are reified as essential (determined) aspects of the person—further they are reified as essentialist (innate) dichotomies.

It is vital that researchers take a reflexive approach to their research and dissemination activities. Reflexivity requires that the researcher examines the assumptions they bring to the research process. In particular the researcher should examine the assumptions that they hold about sex and gender in general, as well as those relating to the gender, age and the socio-economic status of themselves, other individuals, and the communities that are participating in the research project. This reflexive approach should in turn inform, and feed into, their dissemination activities. Every person, including the researcher, is socially positioned, and this social position has a profound effect on how the individual sees the society they live in, how they interact with their society, and how their society sees and interacts with them. Researchers should bear in mind that the way in which their society is organised impacts differently upon the individuals in it, and recognise that the factors of gender, age, and socio-economic status are significant for the relationship between the individual and the society that they live in. Sociocultural factors also affect how we communicate with others.

It is inevitable that researchers will come to research projects with preconceived ideas regarding gender. This is particularly the case in respect of energy as energy technologies and consumption practices are areas where there are strongly gendered assumptions (Wajcman 1991). Researchers therefore need to critically examine these gendered preconceptions in order to avoid making unwarranted assumptions that may negatively impact upon research processes and outcomes. Further, inaccurate gendered assumptions may also negatively impact upon the content of, and approach to, dissemination—thus potentially alienating target audiences.

4 Best Practice in Dissemination Activities

4.1 Language

Language is the tool we use to communicate with each other. Language is what allows us to participate in society, and to share our understanding of the world around us with others. Language reflects the way that we think; but more than that, it also has a significant effect on our thinking. Language has the power to shape scientific and research practice and to reinforce beliefs about gender roles, including who “belongs” in the research environment.

Researchers need to pay particular attention to language; they need to avoid sexist language, and to endeavour to be gender inclusive at all times. They should also attend to language accessibility and avoid technical language and terminology. Language usage can tend to render women as inferior to men, and to render women as invisible in the research environment. Researchers need to be mindful that gender inequality is encoded in language structures. For example, it is common to put the “man” before the

"women"—as in "he or she"; "brother and sister"; "husband and wife". This habit reflects a social value where "the man comes first". Researchers can avoid reinforcing this by changing the word order, by for example using "she or he" instead of "he or she". Also, note that "man and wife" should never be used—"husband and wife" or "wife and husband" or "partners" should be used in preference.

Word choice has a significant impact on who feels included or excluded in any discussion. Pronoun usage is particularly important. The masculine pronoun "he" is often used as a generic pronoun to represent a researcher, a participant or an individual when the sex of the person is unknown. However, research demonstrates that neither women nor men usually understand "he" to refer to women as well as men. (Miller and James 2009). This is especially true when it comes to professions, and positions, that tend to be dominated by men. Women are often expected to understand themselves as included under a generic "he", but this is not the case (*ibid*.). Researchers should not presume that women will understand themselves as included under "he". Women need to be explicitly included. If writing in English, sentences should include both "she and he" rather than "he" alone (unless referring to a specific man, or specifically male persons). In English, the plural "they" can also be used as a singular to avoid exclusion: for example "anyone can play if they learn", although caution should be exercised as there is not agreement on the acceptability of using plural pronouns to represent an individual.

"Man" means both the human species, as well as the male of the species—women are expected to understand themselves as included in this term, but research demonstrates that this is not the case. Children when given the sentence "man needs food" think not of human beings in general, but of male people. Both women and men think of male persons when the term "man" is used. So use of terms such as "men" and "man" to represent both women and men should be avoided—preference should be given to terms such as humanity, humans, people, human being, person, individual; or they should use both "women and men". Androcentric (male-centred) terms that are commonly supposed to include women as well as men should not be used.

Words and expressions that contain "man" or that use "man" as a verb should not be used. For example, substitute "personnel" "workers" or "staff" for "manpower"; "artificial", "handmade" or "synthetic" for "manmade"; "person-month" for "man-month"; "person-hours" for "man-hours".[3]

Particular care needs to be exercised when using words that tend to infantilise, or to diminish women. The term "lady" should not be used; use the term "woman" or "female" instead. The term "girl" should never be used to refer to an adult woman—that is any woman over the age of 18. No reference should be made to women's (or men's) marital status or appearance. It is crucial when gathering and disseminating information to avoid using terminology that reinforces unequal gender dynamics, such as the term "head of the household". Similarly, unnecessary feminine forms should not be used, this includes words ending in *ess, ette, ienne,* and *trix.* For example, substitute "actor" for "actress"; "flight attendant" for "stewardess" or "cabin crew", if plural; "poet" for "poetess"; "comedian" for "comedienne".

[3] An exception to this rule is the word "ombudsman". Ombudsman is Swedish in origin, and is generally considered to be gender inclusive, although the terms "ombuds" or "ombudsperson" may be substituted instead.

Job titles should not be gendered, nor should male terms be used when referencing different professions and occupations—instead use gender inclusive titles. For example, use “businessperson” “manager” or “executive” instead of “businessman” or “businesswoman”; “chair” or “chairperson” instead of “chairman” or “chairwoman”; “office cleaner” instead of “cleaning lady”; “supervisor” instead of “foreman”; “postworker” instead of “postman” or “postwoman”; “police officer” instead of “policeman” or “policewoman”; “salesperson” instead of “salesman” or “saleswoman”; “firefighter” instead of “fireman”.

Researchers in countries that use languages other than English will have to contend with their own particular gendered language issues, in so far as is possible. The principles of gender inclusivity for the English language, outlined above, should be applied across all languages. Women should be explicitly included in language use. And sexist language, or language that is derogatory to women (or men) should be strictly avoided. Female pronouns should be used in addition to male pronouns. Researchers should avoid using terms that reference males only, or terminology that is gendered as male only. Instead they should use gender inclusive titles and terms, or they should specifically reference both female and male terms.

It is particularly important that prior to disseminating any information, the text should be gender-proofed to ensure that these standards are applied.

4.2 Imagery

As with language, images are powerful. Researchers should be mindful of the imagery that they choose to use across knowledge and communications platforms. Images can either challenge, or reinforce stereotypes. Researchers should be proactively gender inclusive. Include images of women in active roles—and particularly as researchers, scientists, technicians and IT personnel. Avoid using images that limit women to domestic situations. When portraying domestic situations, it is important to aim for gender balance and to avoid gender stereotypes. Do not use images that depict women as “passive” and men as “active”—where, for example, men are portrayed as participating in activities with women portrayed as onlookers.

Researchers should not use sexualised imagery of girls and women. Surveys demonstrate that women have more negative views of sexually-explicit imagery than men have (Häggström-Nordin et al. 2009). For example, avoid images where women or girls are in states of undress, or images where women or girls are in sexually suggestive poses. Not only is such imagery offensive to many females (and many males), it also results in non-engagement from females.

4.3 Social Media

Gender differences also arise in the use of social media, and social network services. Women tend to use social network services and social media more than men do, and for more social purposes. For example, research on the usage of Twitter shows women and men have different behaviours — both in how they use Twitter, the content of their tweets, and in how often they are retweeted (Beevolve 2012). The website Twee-Q.com is an assessment tool that enables the assessment of gender balance in retweeting practices. There is gender balance in the overall number of male and female tweeters; however according to Twee-Q,

tweets from male tweeters are twice as likely to be retweeted as tweets from female ones. This may be in part due to the style and content of women's tweets. While both women and men tweet factual information, women tend to personalise their tweets more than men do.

Consideration should be given to retweeting the more personalised tweets that are more typical of female tweeters. Tweets with personalised content will enhance participant engagement with the project.

The mission statement from the creators of Twee-Q captures the essence of communication, and can inform good dissemination practices:

> *Gender equality begins in the conversation, when people who have something to say communicate with people who are interested to listen, who are curious and attentive, and who are not afraid of change. When discussion and reflection leads to action. That's when the magic happens.*
>
> *But how equal is a conversation? What if the core of the conversation is unequal? What if we rather listen to, acknowledge and pass on opinions or thoughts from a particular gender? Simply put: what if we generally evaluate the arguments of a particular sex higher, perhaps without even knowing it ourselves? Well, in that case the conversations are broken.*

4.4 Gamification

When designing the gamification aspect of the communication/dissemination platform, gender sensitivities must be addressed. Hamari (2015) demonstrates that gamification produces positive effects such as increased user engagement, and improved behavioural outcomes. However, these positive effects are highly dependent on the context of gamification, as well as the qualities of the users (Hamari et al. 2014). Research from Hamari and Koivisto (2015) demonstrates that people's attitudes and willingness to use a gamification service are positively impacted by social influence, positive recognition and reciprocity; further these effects contribute to use continuance. Koivisto and Hamari (2014) find that women report greater social benefits from the use of gamification. Women value the social aspects of gamification more than men do and they perceive the associated social community more positively.

It seems that males and females tend to interact with IT and social media differently (Venkatesh & Morris 2000). Models of gamification should be tested on both women and men. The importance of imagery is particularly significant here. As mentioned above, avoid sexualised imagery, or using any imagery that incorporates female and male stereotypes to avoid negative impacts.

Research shows that social factors can have a significant impact on IT usage. In general, men tend towards more instrumental behaviour and tend to be more task and achievement oriented than women are; while, in general, women are more concerned with social relations and are more socially motivated with regard to IT adoption. However these are just general tendencies, and do not apply in all cases. For example, with regard to mobile learning, men are reported to be more influenced by social factors than women are (Wang et al. 2009). Further, it should always be born in mind that behaviours and interests vary across both women and men. Avoid stereotyping behaviours and interests as male or female—aim for overall

inclusivity. Remember there are considerable commonalities between women and men—despite strong socialisation that works to emphasise difference. There is great variation in motivation to adopt and use IT *within* genders and age cohorts also—"in general" does not mean "all"!

It is important to avoid gender stereotyping in designing and developing gamification for the ENTRUST platform. Researchers should aim for gender inclusivity in developing apps and interactive displays. They should not develop separate themes and imagery for male and female participants—gamification elements should be not be gendered. Developing "blue" and "pink" themes can reinforce gender stereotypes, and can also be detrimental to participation.

5 Gender-Proofing the Research Process

Consideration must be given to gender inclusivity throughout the entire research process and for all dissemination activities. In order to be gender inclusive in dissemination activities, the information to be disseminated must itself be gender inclusive. It is important to gender-proof the research process, that is, to ensure that questionnaires, focus groups, case studies, etc. are designed and conducted in a manner that is conducive to gender inclusion. Researchers within each institution should establish protocols to ensure that considerations for gender inclusion are identified and implemented throughout the duration of the project. Gender-proofing is required across all elements of the research process in order to generate gender inclusive material for dissemination. Gender balance is required in the research cohorts across the participant communities. Pilot studies, case studies and focus groups must be gender inclusive. Researchers should ensure a representative gender balance that includes consideration of age and socio-economic factors.

Researchers should also avoid stereotypes. Stereotypes are simplistic generalisations about a group of individuals based on their gender, socioeconomic status, or ethnicity, which tend to erase diversity and can lead to unjustified preconceptions about individuals based on their group membership. In order to ensure gender inclusivity, researchers must recognise the complexity of gender, and its intersectionality with other social positions. Gender strongly intersects with other sociocultural positions, including age and socioeconomic status, amongst others. Researchers should recognise that there is great variety in gender identities, behaviours, interests and positions; and participant selection should recognise this variety.

In order to adequately attend to gender inclusivity in dissemination activities, thought should be given to formulating the approach used in interacting with research participant cohorts. This requires attending to gender dynamics in group settings and avoiding practices that may alienate participants from project participation. Consideration should be given to structures that facilitate participant engagement. This can entail, for example, structuring group sessions so that discussion and input from all participants is encouraged and individuals are dissuaded from dominating the conversation.

With regard to gender inclusivity, in addition to language and imagery there are other specifics in relation to data gathering and dissemination that must be considered. It is important to facilitate participation from all stakeholders in the project. Barriers to participation should be identified and steps taken to overcome

them. Consideration should be given to the hours during which research is conducted so that, for example, working women with children can participate. Arrangements should be made to ensure the availability of crèche and child-minding facilities to enable any participants who parent to attend. Buildings should be accessible for people of limited mobility. In order to facilitate the widest participation of all stakeholders, there should be reimbursement of transport costs and any out of pocket expenses of participants.

There may be significant cultural factors particular to each community that may aid or hinder actor participation in the project. It is important that consortium members identify the pertinent barriers to participation that may hamper participation from all stakeholders in the research project.

6 Conclusion

This document lays out guidelines for gender inclusivity in dissemination activities related to the ENTRUST project. The guidelines explain what gender is, why it is significant for this project, and how gender inclusivity can be achieved in dissemination activities. The guidelines emphasise the importance of gender inclusivity, and details the language practices that should be utilised and the considerations that should be given to selecting appropriate imagery for use in dissemination across platforms. The concept of researcher reflexivity is explored in order to encourage researchers to analyse their own gender and social positions, and how they might impact on both the research process, and their communication with participants.

The principles for gender inclusivity that have been described here should be applied across all languages. It is appreciated that the range of languages in the partner communities will offer their own complexities and barriers to gender inclusivity. However a strong effort should be made to explicitly include women in language use. Female pronouns should be used in addition to male ones (even if it is not the norm); and researchers should identify alternative terms to those that reference males only, and use them in dissemination activities.

Best practice with regard to gender inclusion in dissemination activities will enhance the quality of the research, as well as ensuring that the project fulfils its gender inclusivity requirements. This is a live, working document, and as such, it is a starting point in this project. It is intended to develop these guidelines over the duration of the research process. This document will be periodically updated to reflect the experiences and responses of both researchers and participants, and so ensure that we meet our gender inclusivity ideals and commitments.

Key points on gender inclusivity:

- **Gender matters**—research and communication on research is enhanced by gender inclusivity.
- **Be reflexive**—our gender and social position shapes our worldview.
- Language **shapes** both our thinking and our research practice.
- Gender inclusivity **enhances** research outcomes.
- Be **gender inclusive** when selecting terms.
- **Masculine pronouns** should not be used to represent both women and men.
- Terms that **diminish** women—like “lady” or “girl” should be avoided.
- Reference should not be made to women’s [or men’s] **appearance** or **marital status**.
- Avoid **traditional concepts** such as “head of the household” which limit representation.
- Use **gender inclusive** job titles.
- Be **proactively gender inclusive**. Include images of women in active roles as researchers, *etc*. Aim for gender balance when portraying domestic situations.
- Do not use sexualised, or sexually explicit imagery.
- Models of **gamification** should be tested on **both** women and men.
- Attend to **gender dynamics** in a group setting. Participant engagement should be facilitated. Avoid practices that will alienate participants from engaging with the project.
- **Identify barriers** that may hinder full participation from all participants, and take steps to overcome them.
- Prior to disseminating any information the text should be **gender-proofed** to ensure that high standards are applied to the dissemination of content.

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