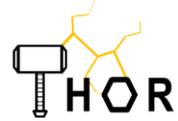Ref. Ares(2019)7518627 - 06/12/2019

Horizon 2020 Grant Agreement no: 814523

Tera**h**ertz end-to-end wireless systems supp**o**rting ultra-high data **R**ate applications

ThoR

Deliverable D1.6

Mid-term Gendered Innovation Check List

Coordinator (EU):   Thomas Kürner
Organisation: Technische Universität Braunschweig

Coordinator (Japan):   Tetsuya Kawansihi
Organisation: Waseda University

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Leader in charge of deliverable: Bruce Napier
Vivid Components

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	Dissemination level	
PU	**Public**	**X**
PP	**Restricted to other programme participants (including the Commission Services)**	
RE	**Restricted to a group specified by the consortium (including the Commission Services)**	
CO	**Confidential, only for members of the consortium (including the Commission Services)**	

Contents

Change register

Version	Date	Author	Organisation	Changes
A_DRAFT	22-Nov-2019	Bruce Napier	Vivid	Initial
A	22-Nov-2019	Bruce Napier	Vivid	No changes following review; formatting only

Reviewed by   Prof. Thomas Kürner   TUBS   A_DRAFT   22-Nov-2019

1. Statement of independence

The work described in this document is genuinely a result of efforts pertaining to the ThoR project. Any external source is properly referenced.

Confirmation by Authors: Bruce Napier   Vivid Components

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2. <u>Executive summary</u>

This document assesses the ThoR project against the Gendered Innovation check list for engineering referred to from the EC website:

http://genderedinnovations.stanford.edu/methods/engineering_checklist.html

accesed on 9th of October 2018 through

http://ec.europa.eu/research/swafs/gendered-innovations/index_en.cfm

It has been reviewed at this mid-term stage in the project, and no changes are considered necessary.

"This checklist is intended for researchers, project directors and evaluators, grant writers, and funding organizations addressing the development of technologies and related products, services, infrastructures, or processes. It provides a set of key questions for incorporating sex and gender analyses into engineering—as a basis for developing Gendered Innovations. As such, it complements and should be read in conjunction with the methodology described in Engineering Innovation Processes. For product design, see Schröder, 2012[1]."

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[1] Schröder, K. (2012). *Female Interaction Strategy*. Aarhus: Design People.

http://www.femaleinteraction.com/

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3. <u>Introduction</u>

1. Potential consumers of technology have different characteristics (gender identities, sex, age, ethnicity, profession, occupation, education, income, household and living arrangements, familiarity with and attitudes towards technology, etc.) What role, if any, do sex and gender play with regard to the developing technology? (see Analyzing Research Priorities and Outcomes; Analyzing Factors Intersecting with Sex and Gender)

➔ The ThoR technology development is at a fairly fundamental level. The gender of consumers of the technology does not have a significant role.

3.1. (A) Determining the Relevance of Sex

2. Are there basic anatomical and physiological differences between women and men that should be considered (e.g. in height, strength, range of motion, etc.)? (see Term: Sex; see Methods: Analyzing Sex; Rethinking Standards and Reference Models)

➔ No.

3. Are there further anatomical and physiological differences between women and men that should be considered (e.g. in vision, hearing, voice pitch, sense of touch, smell, and taste, pro-prioceptors, muscular tension, temperature perception, etc.)?

➔ No.

3.2. (B) Determining the Relevance of Gender

4. What are the potential application areas of the technology (e.g. professional life, leisure activities, home, etc.)? Do these contexts suggest different patterns of use by different groups of potential consumers (e.g. women and men)? See Term: Gender; see Method: Analyzing Gender.

➔ The potential applications of ThoR include improving access to the internet. Although this may imply different patterns of use by different potential customers, the ThoR technology itself is gender-transparent.

5. Might different groups of potential consumers (e.g. women and men) have different expectations regarding the interface? Do certain features of previous innovations reinforce existing gender inequalities, gender norms, or stereotypes? (see Reformulating Research Questions; Participatory Research and Design)

➔ No.

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6. Might different groups of potential consumers (e.g. women and men) have different expectations regarding the exterior design?

➜ No.

7. Might different groups of potential consumers (e.g. women and men) have different expectations regarding the features and functions?

➜ No.

8. Is it more cost-effective to tailor the technology to specific groups (e.g. women and men) at early development stages or could it be inexpensively adapted in post-development?

➜ There is no tailoring to a specific group.

9. Is there a risk of stereotyping or offending potential consumers through the exterior design (e.g. imposing role models, avatars, different forms of sexism, etc.)?

➜ No.

10. Is there a risk of excluding certain groups (e.g. men or women) through the technology design?

➜ No.

11. Would certain configurations reinforce existing social roles (e.g., gender segregation in the work force; men associated with engineering and women with domestic technologies, for example)?

➜ No.

12. On the basis of the above, what are the relevant sex and/or gender variables for your business, and what do you need to know that you do not currently know or understand concerning sex and/or gender?

➜ There are no relevant sex and/or gender variables.

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3.3. (C) Determining the Tools Required

13. Is it possible and/or necessary to establish a usability lab or to run ergonomic tests? What additional tools might you use for monitoring (questionnaires, workshops, etc.)?

➔ No.

14. Have you ensured diversity within test groups (in terms of age, sex, gender identity, height, etc.)?

➔ There is no need for a test group in the project.

15. Do you inform your customers about gender-tailoring in your technologies?

➔ There is no gender-tailoring..

3.4. (D) Determining the Potential for Innovation

16. Can you think of any additional customer groups or application areas for your technology?

➔ No.

17. How much research would be necessary to identify those groups/markets?

➔ N/A.

18. Is your business model missing potential opportunities by not addressing sex and gender sufficiently? Where might sex and gender analysis open up new business opportunities through Gendered Innovation?

➔ The ThoR consortium does not believe that it is missing any potential opportunities.

3.5. (E) Procuring Sex and Gender Expertise

19. Have you identified the particular gender expertise you require?

➔ The ThoR consortium does not believe that it requires any particular gender expertise.

20. Do your internal and external teams include the needed gender expertise? If not, what efforts are your teams making to bring in gender specialists?

➔ N/A.

21. Do members of the target group(s) have particular expertise relevant to developing or applying the technology that should be incorporated into the innovation process?

➔ N/A.

22. What efforts is your team making to ensure that the diverse expertise, interests and needs of the target groups are incorporated into the design and development of the product? (see Participatory Research and Design)

➔ N/A.

23. Do certain groups hold knowledge (e.g., because of gendered divisions of labor) with the potential to prevent unwanted outcomes, such as increased gender bias or environmental damage?

➔ No.

24. What efforts is your team making to ensure that it learns from the inputs of external expertise concerning sex and gender, and builds relevant capabilities in-house?

➔ No.

25. Does your team understand how to incorporate gender expert knowledge and innovation criteria into existing design, engineering and quality methods such as Quality Function Deployment (QFD), Failure Mode Effect Analysis (FMEA), or Six Sigma?

➔ N/A.

4. <u>Works Cited</u>

"This Checklist is based on the Fraunhofer - project "Discover Gender", which was funded from the German Ministry for Research from 2004-2006. See:

Bührer, S., & Schraudner, M. (Eds.) (2006). Wie können Gender-Aspekte in Forschungsvorhaben erkannt und bewertet werden? Karlsruhe: Fraunhofer Verlag.

Schraudner, M. (2010). Fraunhofer's DiscoverGender Research Findings. In Spritzley, A.,Ohlausen, P., Sprath, D., (Eds.), The Innovation Potential of Diversity: Practical Examples for the Innovation Management, pp. 169–185. Berlin: Fraunhofer-Institut für System- und Innovationsforschung.

Schröder, K. (2012). [Female Interaction Strategy](). Aarhus: Design People"