Informed Consent

1. Purpose of Research

(1) Research Purpose, Significance, and Request for Participation

In this study, we are recruiting participants via crowdsourcing to listen to a variety of speech sample and evaluate their quality. The evaluation data provided by you is essential for understanding the relationship between different factors and subjective speech quality and establishing a universal subjective speech quality assessment scale. We might further use these data to develop automatic speech quality prediction methods. Finally, these data might made public in the future to accelerate research and development, with the guarantee that no personal information will be revealed.

This research is conducted with the approval of the Ethics Review Committee of the Graduate School of Informatics at Nagoya University and the permission of the head of the research institution. We ask for your understanding of the purpose of this study and your cooperation.

(2) Voluntary Nature of Consent and Freedom to Withdraw

Whether or not to participate in this study is entirely up to your own free will. You will not suffer any disadvantage if you choose not to participate. Furthermore, even after consenting and starting the task, you may interrupt the task (e.g., by closing the browser) and withdraw your consent at any time. Even after data submission, it is possible to delete your data if it is before the research results are published in a paper or similar outlet. In such cases, you will not suffer any disadvantage.

2. Explanation of Research Plan

- **Research Project Title:** Research on Establishing a General-Purpose Subjective Speech Quality Assessment Scale through Crowdsourced Listening Tests using Heterogeneous Speech
- **Research Institution Name:** Graduate School of Informatics, Nagoya University
- **Principal Investigator:** Wen-Chin Huang, Graduate School of Informatics, Nagoya University
- **Joint Research Institutions / Responsible Persons:** None
- **Items to be Surveyed:**
    - Listening evaluation data (quality scores for presented speech)
- **Research Period:** 1 year from the date of approval

(1) Research Purpose and Predicted Results The purpose of this study is to attempt to establish a general-purpose subjective speech quality assessment scale. When developing automatic prediction methods, your listening data will be used as the standard (ground truth labels).

(2) Reasons for Requesting Participation At present, only humans can accurately judge the quality of speech. Since obtaining a large number of opinion scores is essential for accuracy, we are requesting your participation.

(3) Research Methods We will use a system on a web browser. You will wear headphones or earphones and listen to the played speech. You will perform a task to evaluate its quality numerically, by choosing from 1, 1.5, 2, 2.5, 3. 3.5, 4, 4.5, 5. Collected data will be managed using an ID, which does not identify individual names.

(4) Response to Participants after Research Completion We will not provide feedback on individual results, but the overall results of the research will be published at academic conferences and in papers.

(5) Further Information on the Implementation Plan If desired, we can disclose the contents of the research plan to the extent that it does not hinder the protection of other participants' personal information or the originality of the research. Please contact the inquiry desk listed at the end of this document.

3. Benefits and Disadvantages (Potential Risks/Discomfort) to Participants

- **Benefits:** Those who complete this task will be paid a prescribed reward (compensation for work) based on the regulations of the crowdsourcing platform. Additionally, the results of this research will contribute to the future development of speech science and technology.
- **Disadvantages/Risks:** As this is a web-based listening task, physical risks are considered extremely low. As the task involves concentrated listening, you may feel fatigue. Additionally, in rare cases, listening to speech that is difficult to understand may cause stress. Please proceed at your own pace, taking breaks as appropriate. You may stop the task at any time if you feel uncomfortable.

4. Response if You Do Not Participate You will not suffer any disadvantage if you choose not to participate after reading the explanation. Also, if you wish to stop partway through the task, you can do so at any time by closing the browser.

5. Protection of Personal Information Your privacy will be strictly protected. The collected data will be managed by linking it to a unique ID, but information that can directly identify individuals, such as names, addresses, and phone numbers, will not be collected. Since speech data contains biometric information, it will be stored strictly on a password-locked server or similar. When announced as research results, data will be published as statistical data or in a processed state (pseudonymized data) where individuals cannot be identified.

6. Disclosure of Research Information If you wish, you may obtain or view the research plan and materials regarding research methods to the extent that it does not hinder the protection of other research subjects' personal information or the assurance of the research's originality. If you wish to do so, please contact the inquiry desk listed at the end. Please note in advance that we will not disclose (provide feedback on) your individual research data (such as analyzed speech recognition accuracy or intelligibility scores) in this study.

7. Publication of Research Information and Results Research results may be published in conference presentations, academic journals, and internet databases. In any case, your name or identity will not be revealed.

8. Intellectual Property Rights Arising from the Research If intellectual property rights such as patents arise as a result of this research, those rights will belong to the researchers and the research institution (Nagoya University).

9. Storage and Disposal of Samples and Information Used in Research Collected data will be stored at Nagoya University for an indefinite period for the verification of research results and future secondary use (database creation).

10. Costs for Research Expenses related to research participation (headphones, etc.) are borne by the participant, but a reward will be paid upon completion of the task.

11. Response to Adverse Events/Health Damage As this is an observational study involving no invasion, health damage is not anticipated. However, should you suffer any disadvantage due to participation in the research, please contact the Principal Investigator immediately. Note that there is no financial compensation for health damage caused by this research.

12. Monitoring Monitoring will not be conducted.

13. Research Funding and Conflict of Interest This research is conducted with the support of a grant from JSPS KAKENHI Grant Number 25K00143, Japan. Regarding this research, there are no conflicts of interest to disclose between the researchers and any companies.

14. Unspecified Future Research The data you provide may be used for speech technology research conducted by other research institutions in the future, or by private companies (such as the use of training data for commercialization).

15. Provision of Research Results to Other Institutions The constructed database will be provided (released) to third-party research institutions that have undergone appropriate review.

16. Contact for Inquiries and Complaints

Inquiry Desk: Person responsible for explanation and consultation: Wen-Chin Huang, Assistant Professor, Graduate School of Informatics, Nagoya University (Phone: +81-52-789-3809, E-mail: huang.wen.chin.e7@f.mail.nagoya-u.ac.jp)

Date of Explanation: As displayed on the web screen.

【Confirmation of Consent】

By proceeding, you confirm you are an adult aged 18 or older, and you have read the explanation document and understood the content of the research.