



Methodological Best Practice for Forensic Semiautomatic and Automatic Speaker Recognition

Presenter(s) / Leader(s) / Moderator(s):

A. Drygajlo (FSAAWG Vice-Chair), S. Gfroerer (BKA), M. Jessen (BKA), T. Becker (BKA), I. Wagner (BKA), T. Niemi (NBI), J. Vermeulen (NFI), D. Ramos (ATVS), R. Haraksim (IPS)

Target audience: Experts, members of the ENFSI FSAAWG have priority

Maximal number of participants: 30

Minimum number of participants: 10

Duration of workshop: Half a day

This workshop, organized by ENFSI Forensic Speech and Audio Analysis Working Group (FSAAWG) will introduce and summarise recent developments on methodological best practice in semi-automatic and automatic speaker recognition for forensic case assessment and interpretation. It aims at presenting universal methodology, to be used for any specific data of the case, that provides a coherent way of assessing and presenting recorded speech as scientific evidence and assisting in an investigative capacity of forensic scientists. The main focus is on guidelines for the calculation of the evidence and its assessment taking into account the models of the within-source variability of the suspected speaker, the between-sources variability of the relevant population and between-session variability given the questioned recording. Keynote speakers will share their experience and essential knowledge as well as bring the latest updates on the methodology. First, an overview of modern semiautomatic and automatic speaker recognition technology and its applications for evaluative purposes will be given. Secondly, we will present a robust methodology for forensic semiautomatic (SFASR) and automatic speaker recognition (FASR) based on sound deterministic, statistical and probabilistic methods and Bayesian interpretation of evidence, validated using databases recorded in real-life conditions. This workshop covers methodology, case assessment, evaluation and interpretation, case file and reporting, as well as quality assurance for best practice in forensic semiautomatic and automatic speaker recognition. It reports, among others, on the research work done in the framework of Z3 project "Methodological guidelines for semi-automatic and automatic speaker recognition for case assessment and interpretation" of the ENFSI Monopoly Programme 2011 "Improving Forensic Methodologies across Europe (IFMAE)".