



1. Purpose and Scope

This guidance applies to all generative music models that:

- Accept user-uploaded audio (voice, instrument, full tracks)
- Use such uploads for training, fine-tuning, or inference
- Generate new musical output for end users

2. Document Control

| Version | Date | Author | Editor | Summary of changes |
|---------|----------|--------------|--------------|--------------------|
| 1.0 | Dec 2025 | Petra Kühnle | Petra Kühnle | Initial release |

3. Normative References

- Regulation (EU) 2016/679 (GDPR)
- Regulation (EU) 2024/1689 (EU AI Act) – high-risk AI systems
- ICO Guidance on AI and Data Protection (2023–2025)
- ENISA “Securing Machine Learning Algorithms” (2021)

4. Definitions

| Term | Definition |
|----------------------|---|
| Training Data Opt-In | Explicit, granular, and withdrawable consent to use uploaded audio for model training |
| Voice Biometric Data | Special-category personal data under Art. 9 GDPR |
| Style Leakage | Unintended reproduction of an individual artist’s recognizable style in outputs |

5. Mandatory Requirements

5.1 Lawful Basis and Consent Architecture

| Req ID | Requirement | Implementation Notes |
|--------|--|-----------------------------------|
| LB-01 | Explicit consent required for any training use | Default OFF, separate checkbox |
| LB-02 | Consent withdrawal must trigger data deletion pipeline | One-click “Remove my data” button |
| LB-03 | No bundling of training consent with service access | Freely given (Recital 43) |

5.2 Transparency Obligations

| Req ID | Requirement |
|--------|--|
| TR-01 | Privacy notice at point of upload (layered notice) |
| TR-02 | Inform users if outputs may contain traces of others’ data |
| TR-03 | Provide high-level explanation of how the model works |

5.3 Data Protection by Design

| Req ID | Requirement |
|--------|--|
| DP-01 | End-to-end encryption of raw uploads |
| DP-02 | Automatic deletion of raw audio after 30 days unless opted-in for longer retention |
| DP-03 | Training-data anonymization where technically feasible |

5.4 Fairness and Bias Mitigation

| Req ID | Requirement |
|--------|--|
| FB-01 | Document demographic/genre distribution of training data |
| FB-02 | Annual bias audit of generated outputs |

5.5 Data Subject Rights Pipeline

| Right | Maximum Response Time | Technical Implementation |
|-------------------|-----------------------|---|
| Access (Art. 15) | 30 days | Download raw + embeddings |
| Erasure (Art. 17) | Immediate | Delete + model unlearning (best effort) |

| Right | Maximum Response Time | Technical Implementation |
|---------------------|-----------------------|--------------------------|
| Objection (Art. 21) | Immediate | Block future use |

6. Data Protection Impact Assessment (DPIA)

Mandatory pre-deployment DPIA template available in Appendix A.

7. Record of Processing Activities (Art. 30)

Maintained in Obsidian.

Note: Background graphic concept developed in collaboration with Grok (xAI).

Appendix A – DPIA Template

Data Protection Impact Assessment (DPIA) for Generative Music AI Systems

Project Name: [e.g., AI Music Generation Tool]

Assessor: Petra Kühnle

Date: Dec 2025

Version: 1.0

1. Description of Processing

- **Purpose:** Generate music from user uploads (audio/voice).
- **Data Types:** Voice biometrics, audio files (potential special-category data).
- **Scope:** Training/fine-tuning models; outputs for users.

2. Necessity and Proportionality

- Is processing necessary? Yes, for model improvement.
- Alternatives? Anonymized data only, but limits functionality.

3. Risks to Rights and Freedoms

| Risk | Likelihood | Severity | Mitigation |
|---------------------------------|------------|----------|---------------------------------|
| Data breach (voice biometrics) | Medium | High | End-to-end encryption (DP-01) |
| Style leakage (artist identity) | Low | Medium | Annual bias audits (FB-02) |
| Unauthorized training use | High | High | Explicit opt-in consent (LB-01) |

4. Measures to Address Risks

- Technical: Anonymization (DP-03), deletion pipelines (LB-02).
- Organizational: Consent withdrawal flow (Appendix C), transparency notices (TR-01).

5. Consultation

- Stakeholders: Legal team, users, data protection officer.
- Outcome: [To be filled after review].

6. Approval

- DPO Sign-off: _____ Date: _____

(Customize as needed; conduct full DPIA pre-deployment.)

Appendix B – Model Card Template for Music Models

Model Card for [Model Name, e.g., MusicGen AI v1]

Intended Use: Generate music from user audio inputs for creative/therapeutic purposes.

Out of Scope Use: Commercial exploitation without consent, harmful content generation.

Model Details:

- Architecture: [e.g., Transformer-based with audio embeddings].
- Training Data: User-opted audio (demographics documented per FB-01).
- Parameters: [e.g., 1B].
- Compute: [e.g., 100 GPU-hours].

Performance:

- Metrics: [e.g., Perceptual audio quality score: 4.5/5].
- Bias Evaluation: Annual audit (FB-02); genre distribution: 40% pop, 30% classical, etc.

Ethical Considerations:

- Data Protection: Compliant with GDPR/EU AI Act (high-risk).
- Risks: Style leakage mitigated by anonymization.
- Limitations: May reproduce biases in training data.

Maintenance:

- Version: 1.0
- Contact: Petra Kühnle
- Updates: Bias audits yearly.

Appendix C – Consent Withdrawal Flow Diagram

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The diagram below outlines the consent withdrawal process, designed to fit A4 portrait export (vertical layout).

