

Does TikTok's STEM Feed Systematically Amplify Health Misinformation Differently Across EU Member States?

⚠ NOTE FOR STUDENTS — This is a model application

This document is a fictional but realistic example built for educational purposes.
All names, institutions, and funding details are invented.
Use this as a template to understand what each field requires.

Principal Researcher	Dr. Mario Rossi
Institution	Università degli Studi di Torino — Italy [FICTIONAL]
Department	Dipartimento di Informatica
Research Group	Digital Wellbeing & Platform Governance Lab [FICTIONAL]
Target VLOP	TikTok (TikTok Technology Limited, Ireland)
DSC of Submission	AGCOM — Autorità per le Garanzie nelle Comunicazioni (Italy)
DSC of Establishment	Coimisiún na Meán (Ireland)
Application Date	28 October 2025
Research Duration	18 months (November 2025 – April 2027)
Legal Basis	Art. 40(4) DSA · Delegated Regulation (EU) 2025/2050

PAGE 1 — RESEARCHER INFORMATION AND DECLARATIONS

Goal: show who is behind the application and that research is your institution's primary purpose.

1.1 Principal Researcher — Full Name *

Rossi, Mario

1.2 Principal Researcher — EU Login Account ID *

mario.rossi@unito.it [EU Login account registered] [FICTIONAL]

Every researcher on the team must create an EU Login account before the application can be submitted.

1.3 Research Organisation — Name and Type *

Università degli Studi di Torino [FICTIONAL AFFILIATION] Organisation type: University / Higher Education Institution Affiliation type: Full-time researcher (permanent staff)

1.4 Co-Researchers *

Name	Institution [FICTIONAL]	EU Login [FICTIONAL]
Dott.ssa Laura Conti	Università di Napoli Federico II	l.conti@unina.it
Dr. Jean Dubois	Université Paris-Est Créteil	j.dubois@u-pec.fr

1.5 Evidence of Institutional Affiliation *

Uploaded: (a) Employment contracts for all three researchers [PDF — FICTIONAL]; (b) University statutes confirming public research mission; (c) Institutional profiles from unito.it, unina.it, u-pec.fr.

1.6 Independence from Commercial Interests (optional but recommended)

Uploaded: (a) Signed declaration by each researcher: no current or recent (3-year) employment, consultancy, or equity relationship with TikTok, ByteDance, or any competitor; (b) Institutional conflict-of-interest policy; (c) Confirmation that no third party with a commercial interest has been granted or will be granted preferential access to unpublished findings.

1.7 Independence Declaration *

I confirm and declare that I have disclosed all potential commercial interests and that I am independent from commercial interests within the meaning of Article 40(8)(b) of the DSA. I also declare that the information disclosed is true and complete to the best of my knowledge.

PAGE 2 — RESEARCH PROJECT-SPECIFIC INFORMATION

This page has six sections. Fill them in the order shown. Section 2.F (Publication) is last.

2.A — FUNDING

Goal: show the source, amount, and duration of all funding for the research.

2.A.1 Primary Funding Source *

Ministero dell'Università e della Ricerca (MUR) — PRIN 2024 [FICTIONAL project details]
Grant reference: PRIN-2024-TKSTEM-00001 [FICTIONAL]
Project title: STEMCHECK — Algorithmic Amplification of Health Content on Short-Video Platforms in the EU
Total amount: € 380,000 [FICTIONAL]
Duration: 1 November 2025 – 30 April 2027 (18 months)
Funding institution contact: Dott. Carlo Verdi, MUR Project Officer [FICTIONAL]

2.A.2 Additional / Non-Financial Contributions *

(a) Computing infrastructure: HPC cluster at INFN CNAF (Bologna) — 100,000 CPU-hours/year under national academic agreement [FICTIONAL]. (b) Software: R and Python environments provided by Univ. Torino IT services. No third-party commercial interest.

2.A.3 Funding Coverage of Full Research Period *

The PRIN 2024 grant (18 months) fully covers the entire data access period requested in this application (November 2025 – April 2027). No funding gap exists.

2.A.4 Supporting Evidence

Uploaded: (a) PRIN 2024 Grant Agreement (signed, redacted) [FICTIONAL]; (b) MUR confirmation letter; (c) INFN CNAF computing allocation agreement [FICTIONAL].

2.B — RESEARCH TOPIC AND DATA REQUESTED

Goal: specify which VLOP you are studying, what data you need, and how it links to a systemic risk under Art. 34(1).

2.B.1 Target VLOP *

TikTok operated by TikTok Technology Limited

2.B.2 Research Question *

Primary research question:

Does TikTok's STEM feed classification systematically amplify or suppress health-related content differently across EU member states, and is engagement with health misinformation (identified via comment sentiment and hashtag analysis) correlated with STEM feed eligibility?

Secondary questions:

1. Are videos about vaccines, pharmaceutical treatments, or alternative medicine more or less likely to receive STEM feed eligibility in Italy, France, and Germany, controlling for hashtag category and account verification status?
2. Does STEM feed eligibility predict systematically higher engagement (likes, shares, comments) for videos whose comment sections contain high rates of health-related misinformation terms?
3. Does the country of registration of the posting account predict differences in STEM eligibility rates for the same content category across EU member states?

2.B.3 Systemic Risk Addressed (Article 34(1) DSA) *

This research directly addresses the following systemic risk under Article 34(1) DSA:
→ Art. 34(1)(d): Negative effects in relation to protection of public health and minors.

→ Art. 34(1)(b): Negative effects on the exercise of fundamental rights, in particular freedom of expression and access to information.

Health misinformation amplified through algorithmic feed systems constitutes a documented systemic risk to public health in the EU, as confirmed by the European Commission's 2024 guidelines on systemic risk mitigation. TikTok's STEM feed is a specific risk mitigation measure (Art. 35 DSA) designed to promote credible scientific content. Consequently, this research assesses whether that measure is effective and consistent across EU member states, as required by Art. 35(1)(c).

2.B.4 Specific Data Requested *

All data below is confirmed available in TikTok's DSA Research Tools catalogue.

Dataset: Video and Account Data

For videos watchable by 'Everyone' on the topic of health/medicine (identified via hashtag filtering):

- STEM feed eligibility flag: internal field, accessible via Research API
- Total number of likes
- Total number of comments
- Total number of favorites (saves)
- Voice-to-text transcription / subtitles for content classification
- Creation timestamp
- Associated hashtags
- Playlist information (if any)

For the accounts posting the above videos:

- Country of registration (e.g. 'IT', 'FR', 'DE') not visible on public interface
- Verification status (verified / not verified)
- Follower and following counts
- Username/profile name

For the comment sections of the above videos:

- Comment text
- Total number of likes on each comment
- Total number of replies
- Timestamp of comment

Time period: 1 January 2025 – 31 March 2026

Geographic scope: videos posted by accounts registered in IT, FR, DE, ES, PL

Volume estimate: ~500,000 videos matching hashtag criteria; ~5M comments

2.C — NECESSITY AND PROPORTIONALITY

Goal: prove you cannot answer your research question with less data or non-personal data.

2.C.1 Justification of Data Necessity *

Can this research be done with less data?

Partially. We have minimised the data request to only those fields directly necessary for the research question. For example, we do not request: device identifiers, browsing history, private messages, age or gender of account holders, location data, or any data from accounts of users under 18.

Can this research use fully anonymized data?

The STEM feed eligibility flag and country of registration are structural metadata fields i.e., they do not identify individuals. However, they must be linked to specific video IDs and account IDs to enable the cross-country and algorithmic analysis. Upon receipt, all account IDs will be hashed using SHA-256 before analysis. All results will be published at the aggregate (country/hashtag) level.

Why is comment text necessary:

The research question requires identifying health misinformation in comments. This cannot be done with aggregate counts alone since the text is needed for NLP classification. We apply a pre-validated Italian/French/German health misinformation lexicon (open-source, published by WHO Digital Health Lab, 2024) to classify comments without human review of individual user content.

Data minimization measures applied:

- No collection of data from private accounts
- No collection of age or gender fields
- Hashing of account IDs before storage
- Comment text retained only in tokenized/processed form after classification
- Raw comment text deleted within 30 days of NLP processing
- All outputs aggregated to country-level before publication

2.C.2 Supporting Documentation

Uploaded: (a) Data Management Plan (DMP) v1.0 — October 2025 [FICTIONAL]; (b) Pre-registration of research hypotheses on OSF, ref: osf.io/stemcheck2025 [FICTIONAL]; (c) WHO Digital Health Lab health misinformation lexicon (open-source reference).

2.D — DATA PROTECTION (GDPR)

Goal: describe the full GDPR data lifecycle, from collection and storage to retention and deletion.

2.D.1 Does the requested data include personal data? *

Yes, partially. Comment text is linked to pseudonymous public account identifiers. Country of registration is a pseudonymous field. All processing is designed to minimise contact with any identifiable personal data. No sensitive categories of personal data (Art. 9 GDPR) are requested or processed.

2.D.2 GDPR Legal Basis for Data Processing *

Clarification: Art. 40(4) DSA is the legal basis for this application. The GDPR basis below refers to the actual processing of data once access is granted.

Primary legal basis: Art. 89 GDPR — processing for scientific research purposes, with appropriate safeguards as specified in the DMP. Applicable national law: D.Lgs. 101/2018 (Italian GDPR implementation), Art. 110.

2.D.3 Data Lifecycle Description *

Collection: data received via TikTok Research API (HTTPS, authenticated).

Storage: INFN CNAF HPC cluster (Bologna) — ISO 27001 certified. No local copies.

Processing: within CNAF environment. Scripts in private Git repository. All access logged.

Comment text: deleted in raw form within 30 days of NLP classification.

Account IDs: SHA-256 hashed at point of receipt. Original IDs never stored.

Country codes: retained for 18 months from receipt (duration of analysis).

Aggregated outputs: retained for 10 years for reproducibility (open data policy).

Deletion: all micro-level data securely deleted at end of retention. Confirmed to DSC in writing.

2.D.4 Supporting Documentation

Uploaded: (a) DMP v1.0; (b) DPIA conducted by Univ. Torino DPO, October 2025 [FICTIONAL]; (c) INFN CNAF GDPR processor agreement [FICTIONAL]; (d) Data retention policy.

Tip: involve your institution's Data Protection Officer early — this section is the most time-consuming to prepare.

2.E — DATA SECURITY AND CONFIDENTIALITY

Goal: show that your infrastructure protects the platform's confidential information and trade secrets.

Required even if your research does not use personal data.

2.E.1 Technical and Organisational Measures (TOMs) *

Physical security: INFN CNAF (Bologna) — ISO 27001 certified data centre, biometric access, 24/7 monitoring. No personal device storage of raw data.

Access controls: individual 2FA authentication for all researchers; role-based access; all access events logged and retained 24 months.

Transmission: all data transfers TLS 1.3 encrypted.

Confidentiality: NDAs signed by all researchers covering TikTok's non-public operational data (including the STEM classification logic).

Incident response: breach notification to Univ. Torino DPO and DSC within 72 hours.

2.E.2 Certifications and Standards

Uploaded: (a) INFN CNAF ISO 27001:2022 certificate [FICTIONAL]; (b) Institutional information security policy; (c) Signed NDAs for all researchers; (d) CNAF GDPR processor agreement.

2.F — PUBLICATION COMMITMENT

Goal: commit to publishing your results openly and free of charge, with a concrete date.

2.F.1 Publication Commitment *

We commit to making the results of this research publicly available, free of charge, within a reasonable period — and in any event no later than 30 April 2027.

2.F.2 Expected Publication Date *

30 April 2027 (full open-access publication of all research results). Interim findings: poster at WebSci 2027; full paper at ICWSM 2027.

2.F.3 Open Access Plan *

- Primary articles: Gold OA journals or deposited on Zenodo within 6 months of acceptance
- Aggregated, anonymized datasets: Harvard Dataverse, CC-BY 4.0 licence
- Analysis code: MIT licence on GitHub
- Pre-prints: arXiv (cs.SI) prior to peer review

2.F.4 Supporting Documentation

Uploaded: (a) PRIN 2024 Open Science Plan [FICTIONAL]; (b) Confirmation of Gold OA budget allocation (€ 8,000 for article processing charges) [FICTIONAL].

PAGE 3 — SUMMARY OF THE APPLICATION

Goal: review the complete application before submission.

Research title	Does TikTok's STEM Feed Systematically Amplify Health Misinformation Differently Across EU Member States?
Target VLOP	TikTok Technology Limited (Ireland)
Pathway	Art. 40(12) — public data via TikTok Research API
Systemic risk	Art. 34(1)(d) — public health and protection of minors; Art. 34(1)(b) — freedom of expression and information
Data requested	STEM flag · voice-to-text · hashtags · engagement metrics · country of registration · verification status · comment text
Why DSA was needed	STEM flag and country of registration are internal fields not accessible via any public interface or voluntary programme before the DSA
Time period	1 January 2026 – 31 March 2026
Countries	IT, FR, DE, ES, PL
Team	3 researchers — Univ. Torino (IT), Univ. Napoli (IT), Univ. Paris-Est (FR) [FICTIONAL]
Funding	PRIN 2024 (MUR Italy), € 380,000 [FICTIONAL]
GDPR basis	Art. 89 GDPR — scientific research; D.Lgs. 101/2018 Art. 110
Security	INFN CNAF HPC (ISO 27001); 2FA; NDAs; TLS 1.3; SHA-256 hashing of account IDs
Publication	Open access, Zenodo + Harvard Dataverse, by 30 April 2027

PAGE 4 — ADDITIONAL INFORMATION — CHOICE OF DSC

Goal: decide the DSC to which the application is submitted.

4.1 DSC of Submission *

AGCOM — Autorità per le Garanzie nelle Comunicazioni, Italy.
DSC of the Member State where the principal researcher (Univ. Torino) is established. Contact: [agcom.it/dsa](https://www.agcom.it/dsa)

AGCOM will conduct an initial assessment and transmit the application to Coimisiún na Meán (Ireland), the DSC of establishment for TikTok.

4.2 DSC of Establishment *

Coimisiún na Meán — Ireland. Responsible for the final vetted researcher decision and for issuing any reasoned request to TikTok. Contact: [cnam.ie/dsa-article-40](https://www.cnam.ie/dsa-article-40)

4.3 Rationale for DSC Choice *

Application submitted to AGCOM (Italy) as the DSC of our home member state, per Art. 40(9) DSA and Art. 7 of Delegated Regulation (EU) 2025/2050. Final decision rests with Coimisiún na Meán as DSC of establishment.

PAGE 5 — REVIEW AND SUBMIT

Goal: confirm all information is correct and formally submit the application.

5.1 Declarations *

- All information provided is accurate and complete to the best of my knowledge.
- I have read and understood the conditions for vetted researcher status under Art. 40(8) DSA.
- The research will be conducted solely for the purposes stated in this application.
- All co-researchers have active EU Login accounts and have been invited via the portal.
- The data requested is proportionate and necessary for the stated research purpose.
- I understand the DSC of establishment may request additional documentation.
- Vetted researcher status is granted for this specific research project only.

5.2 Signature — Principal Researcher *

Dr. Mario Rossi [FICTIONAL]
Dipartimento di Informatica, Università degli Studi di Torino
mario.rossi@unito.it
Date: 28 October 2025