

Data Sovereignty for Greece's Radio Audience Research on AWS



Executive Summary

AEMAR (Αστική Εταιρεία Μέτρησης Ακροαματικότητας Ραδιοφωνικών Σταθμών Αττικής) — the industry body responsible for measuring radio audience ratings across the Attica region — manages daily research covering approximately **40 radio stations, 4,000 telephone surveys per month, and 2,000 audio recordings per day**. All research data was previously stored on the research companies' own infrastructure, leaving AEMAR and its member radio stations without independent ownership, access control, or continuity guarantees.

AEMAR engaged LCM Go Cloud to design and build the **Audience Research Management Platform (ARMP)** on AWS — a custom web application with role-based access for four stakeholder types (radio stations, research companies, auditors, and administrators), searchable file management across multiple formats, an integrated audio player for streaming interview recordings, and S3-backed encrypted storage with automated lifecycle policies.

LCM Go Cloud delivered the full platform **within the planned 16-week timeline**, including AWS infrastructure, WordPress-based application with custom APIs, security hardening, and operational handover with SLA-backed support — giving AEMAR and its ~100 users **full data sovereignty** over Greece's radio audience research for the first time.

About AEMAR

The industry body for radio audience measurement in Athens and Attica, serving Greece's commercial radio sector



Industry

Radio & Media Research, Audience Measurement



Daily Reach

80% average daily coverage of Attica's population



Research Scale

~4,000 surveys/month, ~2,000 recordings/day



Radio Stations

~40 commercial radio stations in Attica



Platform Users

~100 users across stations, researchers, auditors, admins



Scientific Oversight

Panteion University

The Business Challenges

Taking ownership of audience research data from fragmented, third-party infrastructure



Data Ownership & Independence

Research data was stored on the research companies' own servers. AEMAR and the radio stations had no independent ownership, no access control, and no guarantee of data continuity if providers changed.



Multi-Stakeholder Access Control

Four distinct user types — radio stations, research companies, auditors, and administrators — each required different permissions for uploading, downloading, streaming, and managing files.



Audio File Scale & Searchability

Approximately 2,000 audio recordings are generated daily. These files needed to be centrally stored, searchable by multiple metadata fields, and available for streaming — not just download.



Compliance & Auditability

GDPR compliance, masked phone numbers, complete activity logging, data retention policies, and regulatory audit access were required from day one — governed by Panteion University's oversight framework.

The Solution

A custom Audience Research Management Platform: Web UI + AWS Cloud Back-End

Web User Interface (ARMP Application)

- User management with 4 role types and granular permissions
- File management: categories, subcategories, tags, metadata
- Single and bulk upload (drag-and-drop) for research companies
- Advanced search by name, category, file type, and upload date
- Integrated audio player for in-browser interview streaming
- File sharing and download with permission controls

AWS Cloud Back-End Services

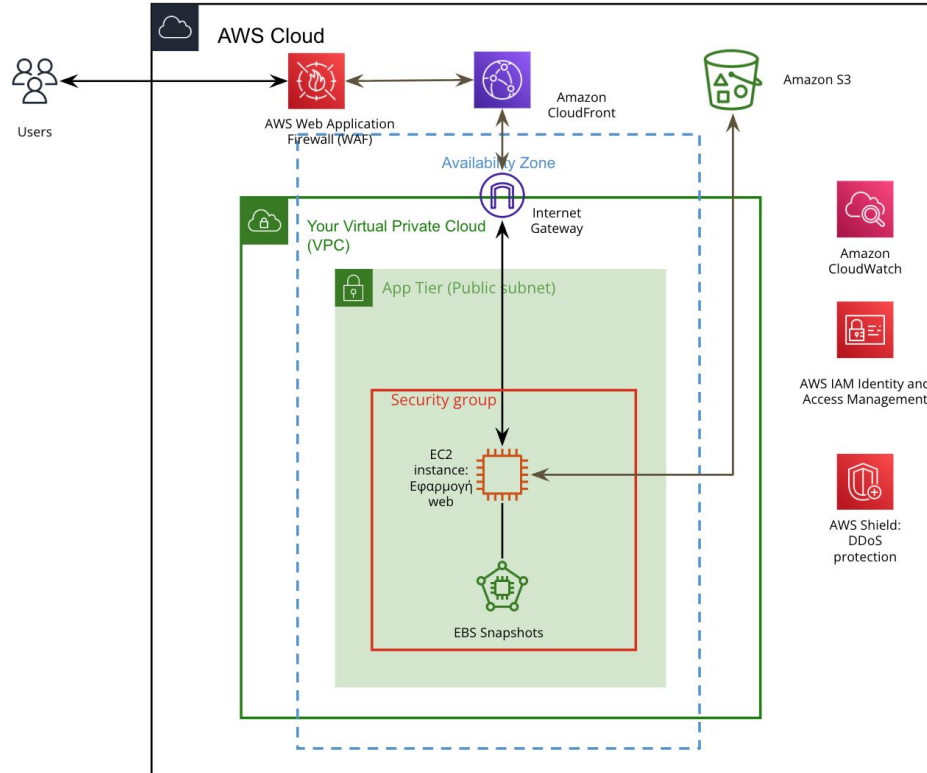
- Amazon S3: encrypted storage across 3+ data centres (11 nines durability)
- Amazon EC2: application server with EBS snapshots for daily backups
- Amazon CloudFront CDN: low-latency content delivery
- AWS WAF: web application firewall against exploits and bots
- AWS Shield: continuous DDoS detection and protection
- Amazon CloudWatch: monitoring dashboards, metrics, and alarms

Governance & Lifecycle Management

- Activity logging with full audit trail (3-month retention)
- File lifecycle policies: archiving and automated deletion
- GDPR compliance: masked phone numbers, data retention rules
- AWS IAM: identity and access management for cloud resources
- WORM-capable S3 storage (write once, read many) for data protection

Solution Architecture

A secure, compliant, high-performance, and cost-optimized AWS architecture



Key Capabilities Deployed



Role-Based Access Control

Four user roles with granular per-category permissions for upload, download, streaming, and admin



Integrated Audio Streaming

Built-in audio player for in-browser playback of interview recordings without download



S3 Storage with Lifecycle Management

Encrypted storage across 3+ data centres with automated archiving and deletion policies



Searchable File Repository

Advanced search by name, category, file type, date, and structured metadata tags



Bulk Upload & Ingestion

Drag-and-drop single and bulk file upload for daily research data from multiple companies

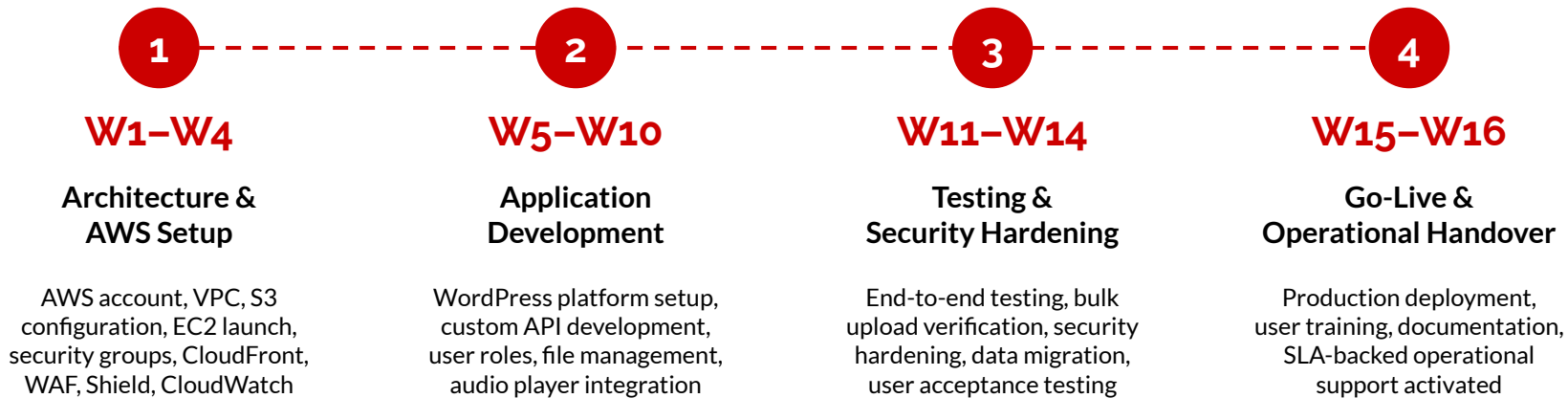


Activity Logging & Audit Trail

Complete user action logging with IP, timestamp, and action type for regulatory oversight

Delivery Timeline

From initial setup to operational handover in approximately 16 weeks



Outcomes & Results

~40

Radio Stations
Served

Full data access for the first time

2,000+

Audio Recordings
Per Day

Centralised, searchable, streamable

11×9s

S3 Storage
Durability

99.999999999% across 3+ DCs

- ✓ Full data sovereignty achieved — AEMAR and radio stations now own and control all audience research data
- ✓ Custom ARMP platform with 4 user roles, granular permissions, and integrated audio streaming
- ✓ Encrypted S3 storage with automated lifecycle management, archiving, and GDPR-compliant retention policies
- ✓ CloudFront CDN for low-latency audio streaming and file delivery across all platform users
- ✓ Complete activity logging and audit trail supporting Panteion University's regulatory oversight framework
- ✓ SLA-backed operational support with 1-hour response for production-critical issues

What Makes This Engagement Unique



Data Sovereignty Achieved

For the first time, AEMAR and its member radio stations own and control their audience research data independently of research providers



Multi-Stakeholder Governance

Four user roles with category-level permissions — radio stations, research companies, auditors, and administrators — in a single platform



Audio at Scale with Streaming

~2,000 recordings per day, searchable and streamable directly in the browser — no download required for quality auditing



Regulatory Oversight Built-In

Activity logging, GDPR compliance, masked phone numbers, and complete audit trail — all governed by Panteion University's scientific framework



Full Application Delivery

Not just infrastructure — a complete custom web application with file management, audio player, bulk upload, and admin panel on AWS



Cost-Optimised Cloud Operations

S3 lifecycle management, CloudFront caching, and continuous cost analysis keep operational costs well below traditional hosting alternatives

Security & Compliance

Multi-layered security protecting audience research data from ingestion to archival



AWS WAF & DDoS Protection

Web Application Firewall against exploits and bots, plus AWS Shield for continuous DDoS detection and mitigation



Encryption at Rest & in Transit

S3 server-side encryption for stored files, HTTPS/TLS for all data transfers, CloudFront secure delivery



Role-Based Access Control

Four user roles with category-level permissions — upload, download, stream, and admin actions controlled per user



Activity Logging & Audit Trail

All user actions logged with IP, timestamp, and action type — 3-month retention for regulatory oversight and compliance



Data Durability & Backup

S3 storage across 3+ data centres (99.999999999% durability), daily EBS snapshots, WORM-capable object locking



GDPR & Data Lifecycle

Masked phone numbers, automated file retention and deletion policies, and data lifecycle management per GDPR requirements

About LCM Go Cloud

Advanced AWS Consulting Partner

Based in Athens, Greece with offices in Cyprus. LCM Go Cloud specialises in Cloud Resilience and GenAI solutions for enterprise clients, with deep expertise in AWS infrastructure, disaster recovery, and AI/ML workloads.

- ✓ Multiple active AWS certifications at Professional and Specialty levels, and multiple AWS Competencies
- ✓ Proven track record in cloud adoption, migration, and infrastructure design for regulated enterprises
- ✓ Full lifecycle AWS delivery: architecture design, deployment, security hardening, and managed operations
- ✓ Production-grade AI on AWS solving measurable business problems for mid-market enterprises
- ✓ Full-stack ownership: infrastructure, AI agents, user interface — one partner, one SLA

Let's Talk!

Discover how LCM Go Cloud can build
your next cloud-native platform on AWS.

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