

# Data Breach Response Plan

# Data Breach Response Plan

“ **Organization:** Bilko — Balkan Accounting SaaS **Document Number:** IRP-BILKO-001 **Version:** 1.0 **Date:** 2026-02-23 **Author:** Compliance Architect **Status:** Draft **Reviewers:** DPO, Legal Counsel, Engineering Lead, CEO **Next Review:** 2026-08-23 **Classification:** Confidential — Restricted Distribution

## Document History

Version	Date	Author	Changes
0.1	2026-02-23	Compliance Architect	Initial draft — three-jurisdiction notification requirements RS/BA/HR

## IMPORTANT — Keep This Document Accessible

“ This plan must be accessible even when systems are down. Maintain offline copies and ensure key contacts are saved in personal phones. Key offline contacts: [compliance@bilko.io](mailto:compliance@bilko.io) | [security@bilko.io](mailto:security@bilko.io) | [dpo@bilko.io](mailto:dpo@bilko.io)

## 1. Incident Classification

Severity	Definition	Response Team	Max Time to Classify
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<b>P1 — Critical</b>	Confirmed breach of Restricted/Confidential data (tax IDs, IBAN, financial records) affecting any number of data subjects; OR active system compromise	Full IRT + Management + Legal	1 hour
<b>P2 — High</b>	Suspected breach with evidence; or confirmed breach of Internal data; or targeted attack detected	Core IRT + Security Lead	2 hours
<b>P3 — Medium</b>	Security event with potential for breach; precautionary action required	Security team	8 hours
<b>P4 — Low</b>	Security anomaly, no confirmed breach	Security team	Next business day

**72-hour notification trigger:** P1 and P2 MUST be assessed for regulatory notification obligation across all active jurisdictions (HR: AZOP; RS: Poverenik; BA: AZLP).

**Financial data sensitivity note:** Bilko handles invoices with national tax IDs (PIB/JMBG/OIB/JIB) and IBAN numbers. Any breach exposing these fields is automatically P1 — tax identity theft has severe consequences for data subjects.

## 2. Detection Mechanisms

Detection Method	Tool	Responsible	Alert Channel
Error rate spike	Sentry	Platform team	Slack #alerts
Railway API/CPU anomalies	Railway metrics	Platform team	Slack #alerts
Failed authentication spike (>10 in 1h)	Auth service logs	Platform team	Slack #alerts
Cloudflare WAF block spike	Cloudflare dashboard	Platform team	Email
Audit log anomalies (unusual DELETE patterns)	LoggedAction monitoring	Security team	Slack #alerts
Third-party notification	Vendor contacts us	Security email	security@bilko.io
User-reported	Support ticket	Support team	Escalate to security
Penetration test finding	External pen tester	Security team	Direct report

**24/7 security contact:** security@bilko.io | compliance@bilko.io

# 3. Response Team Roles & Contacts

Role	Primary	Backup	Email
Incident Commander	CEO (Alem)	Engineering Lead	alem@alai.no
Security Lead	Compliance Architect	Engineering Lead	security@bilko.io
Engineering Lead	Lead Developer	—	engineering@bilko.io
DPO (GDPR/ZZPL/ZZLP)	TBD	Compliance Architect	dpo@bilko.io
Legal Counsel	External (TBD)	—	legal@bilko.io
Communications	CEO	—	alem@alai.no

## External regulatory contacts (72-hour notification recipients):

Jurisdiction	Authority	Contact	When
<b>Croatia (HR)</b>	AZOP — Agencija za zaštitu osobnih podataka	azop@azop.hr / <a href="https://azop.hr/prijavapovrede">https://azop.hr/prijavapovrede</a>	P1/P2 within 72h (GDPR Art. 33)
<b>Serbia (RS)</b>	Poverenik za informacije od javnog značaja i zaštitu podataka o ličnosti	office@poverenik.rs / <a href="https://www.poverenik.rs">https://www.poverenik.rs</a>	P1/P2 within 72h (ZZPL Art. 56)
<b>Bosnia &amp; Herzegovina (BA)</b>	AZLP — Agencija za zaštitu ličnih podataka BiH	info@azlp.ba / <a href="https://www.azlp.ba">https://www.azlp.ba</a>	P1/P2 within 72h (best practice)

**Notify ALL jurisdictions where affected data subjects reside.** If a breach affects data from multiple countries, notify all relevant authorities simultaneously.

# 4. Response Procedures by Phase

## Phase 1: Detection & Identification (0–1 hour)

**Goal:** Confirm whether a breach occurred and scope it.

### Step 1.1 – ALERT RECEIVED

- Log initial alert time: \_\_\_\_\_
- Create incident channel: #incident-{DATE}-{N}
- Assign to security lead
- Start incident log (chronological – everything goes in the log)

#### Step 1.2 – INITIAL ASSESSMENT (within 30 minutes)

- What triggered the alert?
- Is this a false positive? (if YES → close P4, document)
- What systems are affected? (api.bilko.io, Railway DB, Cloudflare R2, SEF/HR-FISK connections)
- Is the attack/leak ongoing?
- What data categories potentially affected? (tax IDs, IBAN, invoice data, user credentials)
- Which jurisdictions are affected? (RS, BA, HR, or multiple)

#### Step 1.3 – CLASSIFY INCIDENT

- Assign severity: P1 / P2 / P3 / P4
- Notify Incident Commander (CEO)
- If P1/P2: Activate full IRT immediately
- If P3/P4: Notify Security Lead

#### Step 1.4 – EVIDENCE PRESERVATION (CRITICAL – before containment if safe)

- Export Railway logs (30-day window around incident)
- Export Cloudflare logs
- Export Sentry error timeline
- Query LoggedAction: `SELECT * FROM logged_actions WHERE action_timestamp > [incident_start]`
- Screenshot anomalous metrics
- DO NOT wipe or restart affected systems until forensics complete

**Exit criteria:** Incident classified, IRT assembled, evidence preserved, 72h clock started if P1/P2.

## Phase 2: Containment (1–4 hours)

**Goal:** Stop the breach. Prevent further data exposure.

#### Step 2.1 – IMMEDIATE CONTAINMENT

- Revoke all JWT refresh tokens (`DELETE FROM refresh_tokens` – forces re-login for all users)
- Block malicious IP at Cloudflare WAF
- Disable compromised API endpoint if applicable
- Rotate `JWT_SECRET` and `JWT_REFRESH_SECRET` (all active sessions invalidated)
- Rotate `FIELD_ENCRYPTION_KEY` if database field encryption compromised
- Isolate affected Railway services if active exfiltration

#### Step 2.2 – SCOPE ASSESSMENT

- Which data was accessed/exfiltrated? (query LoggedAction + Railway logs)

- Which data subjects affected? (query: SELECT COUNT(\*) and list affected organizationIds)
- What jurisdictions affected? (RS data subjects? BA? HR?)
- What time period? (from: \_\_\_ to: \_\_\_)
- Were tax IDs (PIB/JMBG/OIB/JIB) or IBAN exposed?
- Were authentication credentials (password hashes) exposed?
- Draft scope statement for DPO and legal review

#### Step 2.3 – ASSESS CONTAINMENT IMPACT

- What services are disrupted by containment actions?
- Inform support team of expected user disruption
- Prepare user communication if service unavailability expected

**Exit criteria:** Active threat contained, no ongoing exfiltration, scope defined, 72h countdown tracked.

## Phase 3: Eradication (4–24 hours)

**Goal:** Remove root cause. Ensure attacker completely out.

#### Step 3.1 – ROOT CAUSE ANALYSIS

- How did the attacker gain access? (SQL injection? JWT bypass? Compromised credentials? Cloudflare misconfiguration?)
- Was there a vulnerability in Prisma query construction?
- Was org-scoping WHERE clause bypassed?
- How long was access maintained?
- Were other organizations' data accessible?

#### Step 3.2 – REMEDIATE ROOT CAUSE

- Apply security patch
- Fix vulnerability (e.g., missing org-scope, Zod bypass, rate limit bypass)
- Remove any unauthorized database entries or backdoors
- Rotate all secrets and API keys

#### Step 3.3 – VERIFICATION

- Run Playwright security test suite
- Verify org-scoping isolation tests pass
- Verify RBAC tests pass
- Confirm no persistence mechanisms

# Phase 4: Recovery (24–72 hours)

**Goal:** Restore systems safely.

## Step 4.1 – SAFE RESTORATION

- Deploy patched version
- Rotate ALL credentials on affected systems
- Enable enhanced monitoring for 30 days post-recovery
- Verify data integrity (compare LoggedAction against expected state)
- Re-enable services in stages

## Step 4.2 – STAKEHOLDER UPDATES

- Update incident channel with progress
- Brief CEO
- Prepare regulatory notifications (see §5)
- Prepare customer communication if applicable

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# Phase 5: Post-Incident (72 hours – ongoing)

## Step 5.1 – POST-MORTEM (within 5 business days)

- Blameless post-mortem meeting
- Complete timeline of events
- Root cause analysis (5 Whys)
- What went well / what failed
- Action items with owners and deadlines

## Step 5.2 – REGULATORY COMPLIANCE

- All regulatory notifications filed (see §5)
- Data subject notifications sent if required
- DPA customer notifications
- Insurance claim filed

## Step 5.3 – REMEDIATION TRACKING

- All action items in issue tracker
  - Weekly review for 4 weeks
  - Update DPIA with lessons learned
  - Update this response plan
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# 5. Notification Requirements

## 5.1 Croatia — AZOP (GDPR Art. 33 — 72 hours)

**Legal basis:** GDPR Regulation (EU) 2016/679, Article 33 **Required if:** Breach likely to result in a risk to rights and freedoms of natural persons **Deadline:** Within **72 hours** of becoming aware (not confirmed — aware) **Partial notification allowed:** Submit what's known within 72h, supplement later

**Authority:** AZOP — Agencija za zaštitu osobnih podataka **Portal:** <https://azop.hr/prijavapovrede>  
**Email:** [azop@azop.hr](mailto:azop@azop.hr) **DPO submits:** [dpo@bilko.io](mailto:dpo@bilko.io)

### Required information:

- Nature of breach (categories, number of data subjects, number of records)
- DPO contact details
- Likely consequences
- Measures taken or proposed

## 5.2 Serbia — Poverenik (ZZPL Art. 56 — 72 hours)

**Legal basis:** Zakon o zaštiti podataka o ličnosti, Article 56 **Required if:** Breach likely to result in risk to rights and freedoms of individuals **Deadline:** Within **72 hours** of becoming aware

**Authority:** Poverenik za informacije od javnog značaja i zaštitu podataka o ličnosti **Portal:** <https://www.poverenik.rs> **Email:** [office@poverenik.rs](mailto:office@poverenik.rs) **Address:** Bulevar kralja Aleksandra 15, 11000 Belgrade, Serbia

## 5.3 Bosnia & Herzegovina — AZLP (72 hours — best practice)

**Legal basis:** Zakon o zaštiti ličnih podataka BiH — breach notification not explicitly mandated in same detail as GDPR, but best practice is 72-hour notification following GDPR standard. **Deadline:** 72 hours (voluntary/best practice)

**Authority:** AZLP — Agencija za zaštitu ličnih podataka Bosne i Hercegovine **Email:** [info@azlp.ba](mailto:info@azlp.ba)  
**Address:** Hamdije Čemerlića 2/VI, 71000 Sarajevo, Bosnia & Herzegovina

## 5.4 Data Subject Notification (GDPR Art. 34 / ZZPL Art. 57)

**Required if:** Breach likely to result in HIGH risk to data subjects **Timeline:** Without undue delay

**Method:** Direct email to affected users — individual, not public announcement

### Financial data breach — assess HIGH risk if:

- Tax IDs (PIB/JMBG/OIB/JIB) exposed — identity theft risk
- IBAN exposed — financial fraud risk
- Password hashes exposed (weak hashing) — credential stuffing risk
- Note: bcrypt-hashed passwords with cost=12 are computationally infeasible to crack — assess as LOW risk even if hashes exposed

## 5.5 Multi-Jurisdiction Notification Checklist

- Identify all affected data subjects by country
- If Croatian users affected → notify AZOP within 72h
- If Serbian users affected → notify Poverenik within 72h
- If BiH users affected → notify AZLP within 72h (best practice)
- If HIGH risk to any users → notify affected users directly (no undue delay)
- If DPA customers affected → notify per DPA contract terms
- Document all notifications with timestamp and reference number

# 6. Communication Templates

## 6.1 Internal Incident Alert

Subject: [INCIDENT P{SEVERITY}] Security Incident – Bilko – {DATE} {TIME}

Team,

Security incident detected. Details:

Incident ID: INC-BILKO-{DATE}-{N}

Severity: P{SEVERITY}

Detected: {DATE} {TIME} UTC

Jurisdictions potentially affected: {RS / BA / HR}

Data potentially affected: {tax IDs / IBAN / credentials / invoice data}

Status: ACTIVE – Containment in progress

Incident Commander: Alem (CEO)

Incident channel: #incident-`{DATE}`-`{N}`

72h regulatory notification clock started: `{DATE}` `{TIME}` UTC

Notification deadlines:

- AZOP (HR): `{DATE+72h}`
- Poverenik (RS): `{DATE+72h}`
- AZLP (BA): `{DATE+72h}`

Do NOT discuss on public channels, with customers, or social media.

All communications through Alem.

Next update: `{TIME}` UTC

## 6.2 Data Subject Notification (Croatian / English)

Subject: Važna sigurnosna obavijest o vašem računu / Important security notice

Poštovani `{IME}` / Dear `{FIRST_NAME}`,

Bilko (bilko.io) vas obavještava o sigurnosnom incidentu koji je mogao utjecati na vaš račun.

Što se dogodilo / What happened:

Dana `{DATUM}`, saznali smo za neovlašteni pristup našim sustavima koji je mogao izložiti vaše osobne podatke.

Koji podaci su zahvaćeni / Data potentially affected:

`{KATEGORIJE_PODATAKA}`

Što smo poduzeli / What we did:

- `{MJERA_1}`
- `{MJERA_2}`

Što trebate učiniti / What you should do:

- Promijenite lozinku na bilko.io / Change your password at bilko.io
- Omogućite dvofaktorsku autentikaciju / Enable two-factor authentication
- Pratite sumnjive aktivnosti / Monitor for suspicious activity

Za više informacija / For more information:

DPO: dpo@bilko.io

Privacy: bilko.io/privacy

Ispričavamo se za uzrokovanu neugodnost.

We sincerely apologize for any concern this may cause.

Bilko tim / Bilko Team

DPO: dpo@bilko.io

## 6.3 Regulatory Notification Draft (GDPR Art. 33 — for AZOP, Poverenik, AZLP)

To: {AUTHORITY\_NAME} – {AUTHORITY\_EMAIL}

From: {DPO\_NAME}, DPO – Bilko (bilko.io)

Date: {DATE} {TIME} UTC

### NOTIFICATION OF PERSONAL DATA BREACH

#### 1. Nature of the breach:

On {DATE}, we became aware of {unauthorized access to / accidental disclosure of} personal data processed by Bilko. The breach {is/was} {ONGOING/CONTAINED}.

#### 2. Categories of data subjects and approximate numbers:

- Data subjects: {NUMBER} (estimated)
- Categories: {user account data / tax IDs (PIB/JMBG/OIB/JIB) / IBAN / invoice data}
- Records: {NUMBER} (estimated)
- Countries of affected data subjects: {RS / BA / HR}

#### 3. Contact details of DPO:

Name: {DPO\_NAME}

Email: dpo@bilko.io

Organization: Bilko (bilko.io)

#### 4. Likely consequences:

{ASSESSMENT – e.g., "Tax ID exposure creates risk of identity theft; IBAN exposure creates risk of financial fraud"}

5. Measures taken or proposed:

Immediate: {CONTAINMENT\_MEASURES}

Ongoing: {ONGOING\_MEASURES}

Planned: {REMEDIATION\_MEASURES}

6. Note: This is a {complete / preliminary – supplementary notification to follow} report.

[DPO Signature]

{DPO\_NAME}

dpo@bilko.io

## 7. Evidence Preservation

Evidence checklist:

- Railway log export: all services, 30-day window around incident
- Cloudflare log export: WAF events, access logs
- Sentry: error events export
- LoggedAction query: all mutations during incident window  
SELECT \* FROM logged\_actions WHERE action\_timestamp BETWEEN '{start}' AND '{end}'
- PostgreSQL: pg\_stat\_activity snapshot, connection history
- Authentication logs: failed login attempts, token usage

Chain of custody:

- SHA-256 hash all exported files immediately after collection
- Record: filename, hash, collector, timestamp
- Storage: encrypted archive, access restricted to IRT

## 8. Drill Schedule

Drill Type	Frequency	Participants	Scenario
Tabletop exercise	Quarterly	Full IRT + CEO	Tax ID breach / IBAN exposure / credential stuffing

Drill Type	Frequency	Participants	Scenario
Notification drill	Semi-annual	DPO + Legal	72-hour multi-jurisdiction notification dry run
Technical response	Annual	Engineering + Security	Simulated org-scope bypass in staging

**Last drill:** Not yet conducted — schedule within 30 days of product launch **Drill coordinator:** Compliance Architect (security@bilko.io)

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# Approval

Role	Name	Date	Signature
Author	Compliance Architect	2026-02-23	
DPO			
Legal Counsel			
CEO			

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