KEMENTERIAN PERTANIAN REPUBLIK INDONESIA

World Organisation for Animal Health
Founded as OIE

Indonesia Experience: HPAI-Free Poultry Compartments

implementation, evidence, and lessons learned



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Indonesia’s compartmentalisation journey

A practical alternative in an endemic setting

2008

National framework introduced through Minister of Agriculture Regulation No. 28/2008.

“Guidelines for Poultry Compartmentalisation and Zoning of Poultry Production Areas”

2021

Self-declaration **submitted** to the OIE on 4 March 2021.

100 units

GPS – 17

PS – 35

20 companies

FS – 25

Hatchery – 23

2023

260 units/farm HPAI Free

37 companies

GPS – 28

PS – 103

FS – 84

Hatchery – 45

2026

362 units/farm HPAI Free

GPS – 39

PS – 141

FS – 118

Hatchery – 64

The core idea

In Indonesia, compartmentalization is the most practical implementation of regionalization, enabling more focused resource allocation through targeted surveillance, biosecurity, traceability, and government oversight to maintain HPAI-free poultry production within an endemic country.



Why compartmentalisation rather than zoning?

The epidemiological and production context shaped the choice

Endemic HPAI context

H5N1 was endemic, making nationwide freedom difficult to achieve in the near term.

Challenges in enforcing zoning

Controlling poultry movements from infected areas is challenging without physical barriers. Zoning would also involve diverse stakeholders, from backyard farmers to commercial farms, requiring greater resources, coordination, and funding.

Complex external environment

Wild bird populations and their role in AI transmission are difficult to control; geographical boundaries alone may not fully protect production units.

Integrated production systems

Large companies had defined production networks, high biosecurity, standard procedures and resources to establish and maintain compartments.

Strategic distinction

Zoning

Defines status primarily by a geographical area and its boundaries.

→

Compartmentalisation

Defines status through management, biosecurity and separation of epidemiological subpopulations.

Process for Establishing and Recognising HPAI-Free Compartments in Indonesia

A national framework introduced in 2008 to support trade under endemic HPAI conditions

2008 | REGULATORY BASIS — Ministerial Decree No. 28/Permentan/OT.140/5/2008 — zoning, compartmentalisation and supervision

01 — FARM READINESS

- No HPAI reported for at least 12 months
- Business registration approved
- Minimum compartment standards met

02 — DOCUMENTATION

Prepare the administrative and technical documents, including evidence of farm biosecurity and surveillance arrangements.

03 — REGISTRATION

Register the farm unit under the national compartmentalisation procedure.

04 — GOVERNMENT AUDIT

Inspectors assess compliance with minimum standards: separation from infection sources, surveillance, diagnostics, emergency response and control.

05 — EVALUATION & APPROVAL

Audit results are evaluated. A compartment is approved when all requirements are fulfilled.

APPROVAL GATE — Eligibility is assessed against the 3 conditions in Step 1; the audit checks the detailed minimum standards.

AFTER APPROVAL

Maintain HPAI-free status

Daily internal monitoring • Periodic active surveillance and laboratory testing • External surveillance through iSIKHNAS • Annual reconfirmation audit (with additional inspections when needed)

Source: Indonesia's Self-declaration of Freedom from HPAI in Poultry Compartments (update), submitted to WOAH, 5 October 2023, Sections 6–6.3.

What did a qualifying compartment look like?

A compartment was not defined by farm size or production type alone — it was defined by demonstrable separation, control and compliance.

01 Disease history

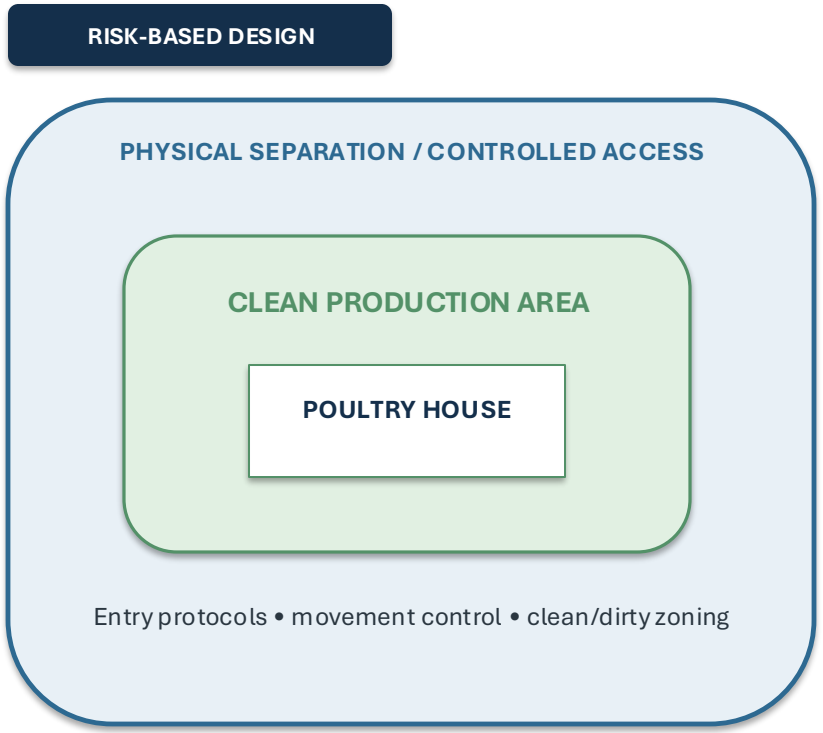
No HPAI reported in the farm unit for at least 12 months before approval.

02 Legal operation

The farm unit had approved business registration.

03 Minimum standards

The unit met the national minimum standards for an HPAI-free compartment.



Location & surroundings

Normally ≥400 m from outdoor poultry/pig farms and potential bird habitats — or a risk-mitigation plan.

Biosecurity plan

Farm-specific risk pathways translated into SOPs and government-supervised implementation.

Whole-chain controls

People, vehicles, animals, inputs, outputs, waste, vectors and internal biosecurity.

Approval criteria in the 2023 dossier: ≥12 months without reported HPAI + business registration + compliance with minimum compartment standards.

What surveillance evidence was used?

Three complementary streams supported confidence in freedom

INTERNAL SURVEILLANCE

- Daily monitoring: clinical signs, mortality, feed intake and productivity
- Syndromic and clinical surveillance
- Periodic antibody (HI) and antigen (PCR) monitoring
- Frequency adjusted to farm risk (examples: monthly or every 3 months)

OFFICIAL FREEDOM SURVEILLANCE

- Conducted by Disease Investigation Centres (DICs), alongside farm inspection
- Cloacal/tracheal swabs and serum samples
- 11 samples per flocks (25% prevalence assumption; 95% confidence level)*
- PCR and Serology testing

EXTERNAL SURVEILLANCE

- Surveillance carried out on the environment outside the compartment which includes identification of risk factors including epidemiological units adjacent to risky compartments such as other chicken farms

- Investigation by district officers or DICs when cases/suspicions occur nearby

95%

Confidence level for sample-size calculation

25%

Expected prevalence

***Department for Environment Food & Rural Affairs:** Compartments for the protection against Avian Influenza and Newcastle Disease in poultry breeding companies in Great Britain

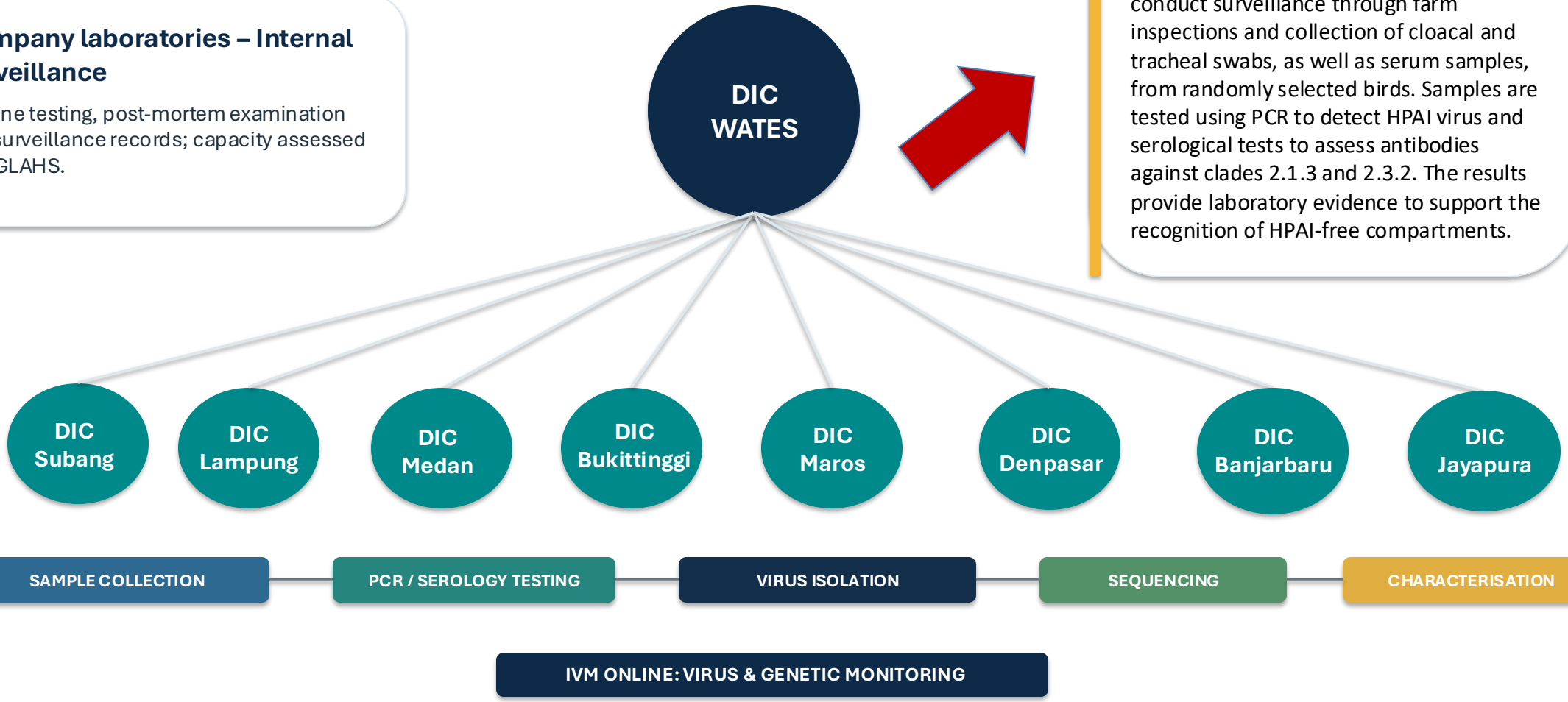
How were laboratories involved?

A tiered network linked company testing with official verification

Company laboratories – Internal surveillance

Routine testing, post-mortem examination and surveillance records; capacity assessed by DGLAHS.

National AI Reference Laboratory



National Laboratories – External surveillance

Disease Investigation Centres (DICs) conduct surveillance through farm inspections and collection of cloacal and tracheal swabs, as well as serum samples, from randomly selected birds. Samples are tested using PCR to detect HPAI virus and serological tests to assess antibodies against clades 2.1.3 and 2.3.2. The results provide laboratory evidence to support the recognition of HPAI-free compartments.

The IVM scheme combined virological and molecular detection with sequencing, antigenic cartography and bioinformatic analysis to inform vaccine seed and challenge-strain selection.

Public–private partnership: who contributed what?

The model worked because responsibilities and resources were complementary

INDUSTRY CONTRIBUTION

- Physical infrastructure: fences, controlled gates, closed housing
- Farm-level biosecurity plans and SOPs
- Dedicated poultry veterinarians and trained technicians
- Company laboratories or contracted diagnostic services
- Routine surveillance, sampling and complete records
- Traceability of birds, eggs, inputs, people and movements

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GOVERNMENT CONTRIBUTION

- Legal framework and technical guidelines
- Inspector training, desk review and field assessment
- DIC diagnostic and surveillance services
- Reference laboratory and proficiency testing network
- Independent verification and periodic supervision
- Technical committee review and official certification

PPP lesson: industry financed and operated the day-to-day controls; government provided the rules, independent verification and public assurance.

How was compartment status maintained?

Internal control + a defined schedule of official supervision

01 CONTINUOUS SURVEILLANCE

- Daily monitoring: health, clinical signs, mortality, feed intake and productivity
- Periodic, risk-based serology and PCR testing
- External risk monitoring via iSIKHNAS; investigate nearby suspicions

02 BIOSECURITY & MOVEMENT CONTROL

- Physical separation, barriers and clean/dirty zones
- Control movement of people, vehicles, animals and materials
- Sanitation, disinfection and safe sourcing/quarantine of incoming poultry or eggs

03 TRAINING & EARLY RESPONSE

- Regular staff training on biosecurity procedures
- Contingency plans, resources and responsibilities prepared
- Immediate reporting of suspicion; isolation and response measures

04 GOVERNMENT OVERSIGHT

- Annual audit to reconfirm compartment status
- District inspections may be conducted at any time
- Immediate investigation if HPAI is suspected

STATUS IS MAINTAINED THROUGH ROUTINE FARM-LEVEL CONTROLS + CONTINUOUS OFFICIAL VERIFICATION

Source: Indonesia HPAI Self-declaration (2023), Sections 6.2–6.5, pp. 8–10.

What were the most difficult requirements to maintain free status in Compartment?

1 Effective biosecurity

Risk assessment needed; Maintaining compliance every day, not just during inspections

2 Contingency Plan

A company may have a well-written contingency plan, but its effectiveness depends on whether suspected cases are reported transparently, authorities are informed promptly, and response measures are implemented jointly

3 Passive surveillance

Since animal health records are maintained internally by the company, it is difficult for us to independently verify the authenticity of the records they present



What benefits materialised—or were expected?

TRADE & BUSINESS VALUE

- A government-recognised assurance pathway for eligible production units
- Intended to support export ambitions for hatching eggs and poultry products
- Protection of investment through separation and controlled production

NON-TRADE VALUE

- Stronger farm biosecurity and management discipline
- Better traceability and documented animal-health controls
- Stronger links between industry, DICs and veterinary authorities
- Improved capacity for monitoring circulating viruses



HPAI context: Current Situation in Indonesia

Latest information located for this presentation (not a full national epidemiological assessment)

ENDEMIC CONTEXT

Indonesia was still described as endemic for HPAI

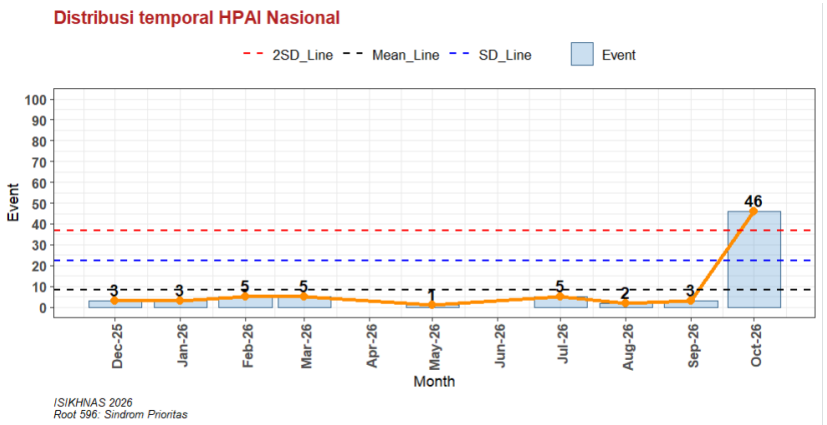
RECENT DETECTIONS

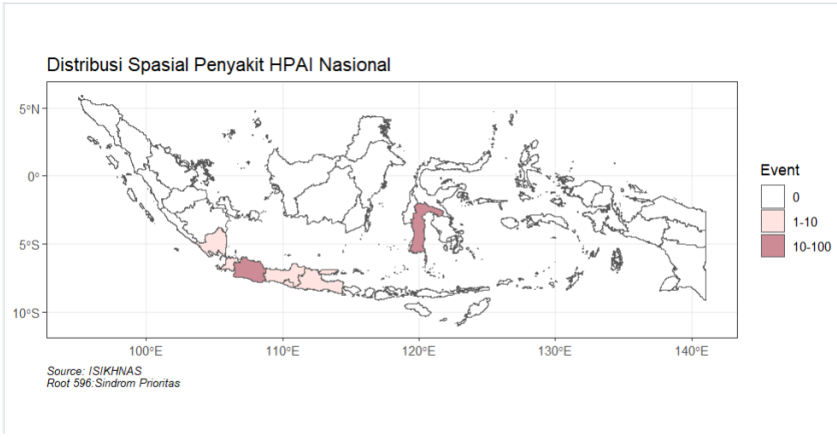
Official AWR October 2026 report listed HPAI events in South Sulawesi, West Java, and Central Java (chickens and ducks).

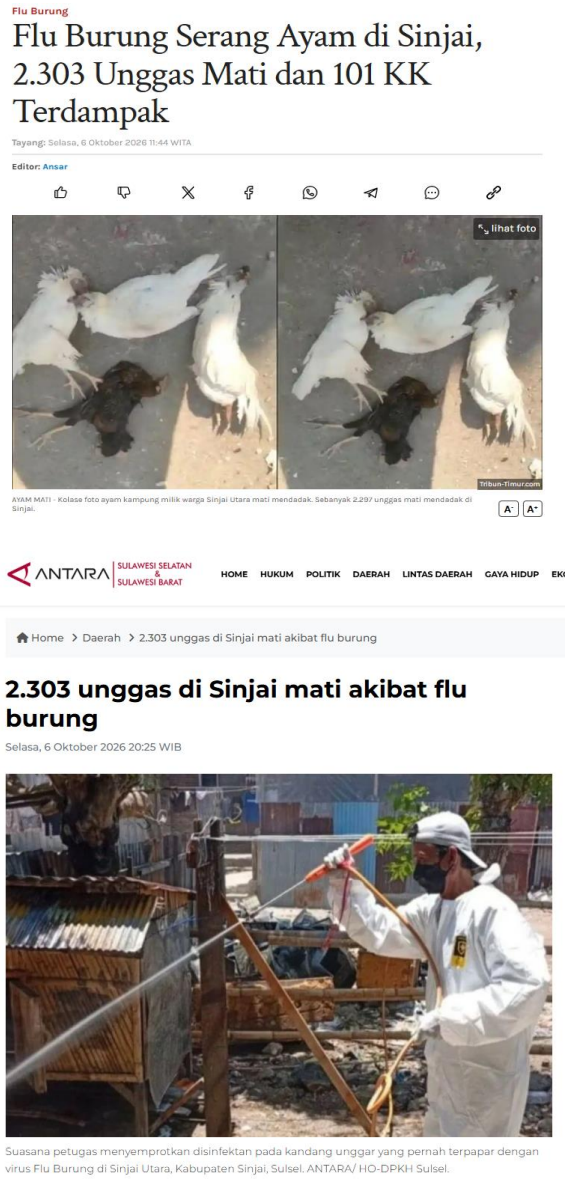
Surveillance and preparedness in 2026

Integrated One Health work

Development of an integrated AI surveillance protocol involving relevant sectors for One Health coordination.







What evidence was needed for the dossier?

Indonesia Submitted self declaration of freedom from high pathogenicity avian influenza in poultry compartments in Indonesia in 2023 to WOAH

1. **National legal basis**

   HPAI notification status; legislation, regulations and reporting directives.

2. **Veterinary Services capacity**

   Authority roles, surveillance responsibilities, DIC network and national coordination.

3. **National disease context**

   HPAI distribution, recent trend, poultry sectors and control measures.

4. **Surveillance & laboratory evidence**

   Passive/active surveillance systems, risk-based activities, diagnostic capacity and test results.

5. **Compartment-level assurance**

   Eligibility, biosecurity, surveillance, movement control, training, early warning and annual audit.

WHAT MADE THE SUBMISSION CONCRETE?

260
compartments listed in Annex 2

12 months
without reported HPAI in listed compartments

ANNEXES THAT SUPPORT THE CLAIM

- Updated list and details of compartments
- Relevant legislation and national reference-lab designation
- Minimum standards checklist for HPAI-free compartments
- Farm-level daily monitoring examples and supporting surveillance data



DISCLAIMER

Self-declaration of freedom from high pathogenicity avian influenza in poultry compartments in Indonesia (update)