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Disaster Communication Governance at Yogyakarta International Airport

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Abstract
Public relations in high-risk infrastructure is not limited to media relations or message dissemination, but also includes stakeholder coordination, meaning alignment, and public trust maintenance during a crisis. This study reframes airport disaster communication as a strategic public relations practice by examining how stakeholder coordination is designed, enacted, and strengthened at Yogyakarta International Airport. Using a qualitative case study approach, data were collected through in-depth interviews, limited observation, and strategic document analysis involving airport authorities, operational units, and disaster-related external stakeholders. Guided by Stakeholder Management Theory and a strategic public relations perspective, the findings show that crisis coordination emerges through negotiated authority, layered information flows, frontline empathetic communication, and simulation-based institutional learning. Formal documents such as standard operating procedures and disaster management plans provide a basic structure, yet their effectiveness depends on cross-unit information synchronization and the capacity to translate technical risk into credible public messages. The study contributes to public relations scholarship by demonstrating that crisis communication in critical infrastructure functions as communicative governance that links stakeholder engagement, organization-public relationships, legitimacy, and adaptive resilience.

***Keywords**: Public Relations, Crisis Communication, Stakeholder Coordination, Disaster Communication, Public Trust*

1. Introduction

Disaster communication has become an important issue for public organizations that operate in high-risk environments because crisis situations can quickly disrupt public safety, institutional credibility, and stakeholder trust. In the context of critical infrastructure, communication is not only needed to deliver information, but also to coordinate decisions, reduce uncertainty, and help affected publics understand what actions should be taken (Selamet, 2019). Airports represent one of the most sensitive forms of critical infrastructure because they connect public mobility, safety procedures, technical systems, and multi-agency coordination in one operational space. When disaster risk emerges, airport communication must work across internal units, external authorities, and passengers who need fast, clear, and credible information(Udir et al., 2025).

This study is important because disaster communication in airports cannot be understood only as an emergency response procedure. It is also a strategic public relations issue because airports must maintain public trust while coordinating technical risk information among multiple stakeholders. Public relations in this context is not limited to media relations or publicity. It functions as a relational and governance practice that aligns organizational decisions, stakeholder expectations, public messages, and institutional legitimacy during uncertainty. Recent public relations scholarship emphasizes that organization-public relationships influence public trust, public evaluation, and behavioral outcomes (Ma et al., 2023). In crisis settings, this relational function becomes more urgent because publics evaluate organizations based on whether they communicate responsibility, care, competence, and credible solutions (Jong, 2025; Tam & Mehta, 2025).

Previous crisis and disaster communication studies have shown that effective communication depends on speed, accuracy, consistency, and the ability to translate risk information into messages that the public can understand (Reynolds & Seeger, 2005; Sellnow & Seeger, 2013). Disaster communication also requires coordination between institutions because no single actor can manage risk information, emergency response, public messaging, and recovery communication alone. In Indonesia, disaster communication studies have highlighted the importance of preparedness education, communication technology, stakeholder coordination, and community risk awareness. For example, disaster preparedness education

using videos and booklets has been shown to improve earthquake and tsunami preparedness among coastal communities (Khair et al., 2021). Other studies also show that communication infrastructure, radio systems, satellite phones, and mobile technology are crucial when a disaster disrupts normal communication channels (Yulianto et al., 2020).

However, airport disaster communication presents a more complex problem than general community-based disaster communication. Airports must coordinate technical information from agencies such as BMKG, operational instructions from airport authorities, air traffic information from Airnav, security actions from AVSEC, and public-facing communication from customer service or frontline personnel. This complexity means that disaster communication governance requires more than formal standard operating procedures. It requires information alignment, stakeholder role clarity, message consistency, and the ability to communicate with passengers in a calm and actionable way. In high-risk organizations, reliability depends on coordination, rehearsal, learning, and sensitivity to operational failure (Howe et al., 2023; Jahn, 2021). These principles are relevant for airport disaster communication because communication failure can create confusion, panic, and declining trust.

Yogyakarta International Airport is a significant case for examining disaster communication governance because it is located in a region exposed to earthquake and tsunami risk while also serving as a strategic transportation hub. Its coastal location makes disaster preparedness more than an administrative requirement. It becomes a public safety issue that depends on the coordination of internal and external stakeholders. The airport has developed formal preparedness mechanisms through standard operating procedures, local agreements, emergency response planning, evacuation signs, and coordination with external agencies. Yet, formal preparedness documents do not automatically guarantee effective crisis communication. Disaster communication failures often occur when information flows are fragmented, messages are inconsistent, and responsible actors are not fully prepared to communicate under pressure (Dougall et al., 2008).

The research gap lies in the limited discussion of how disaster communication governance operates as a strategic public relations practice in airport settings. Existing studies have discussed disaster communication through community preparedness, communication technology, emergency warning systems, and institutional coordination. These studies are valuable, but they do not fully explain how public relations contributes to disaster communication governance in critical infrastructure(Nurjanah et al., 2023; Sufri & Lassa, 2024). In particular, there is still a limited

explanation of how airport stakeholders negotiate authority, synchronize information, translate technical risk, manage passenger anxiety, and maintain institutional credibility during a crisis. This gap is important because airport disaster communication involves both operational coordination and relational communication with the public.

This study addresses that gap by examining disaster communication governance at Yogyakarta International Airport through a strategic public relations perspective. It focuses on how stakeholder coordination, information alignment, empathetic crisis messaging, and institutional learning shape disaster communication practices in a high-risk airport environment. Therefore, this study aims to analyze how disaster communication governance is organized and enacted through stakeholder coordination at Yogyakarta International Airport. It also aims to explain how these communication practices contribute to public trust, institutional legitimacy, and adaptive preparedness in airport disaster management.

2. Method

This study employed a qualitative case study design within a constructivist paradigm. This design was selected because disaster communication governance at Yogyakarta International Airport is not a fixed administrative mechanism, but a communicative process shaped by institutional interpretation, stakeholder interaction, and crisis-related meaning-making. A qualitative case study is appropriate for examining a contemporary phenomenon in its real-life setting, especially when the boundaries between organizational practice, stakeholder coordination, and communication decision-making are closely connected (Yin, 2016). In this study, Yogyakarta International Airport was treated as a single instrumental case because it provides a specific context for understanding how disaster communication governance is organized in a high-risk airport environment.

The research site was Yogyakarta International Airport in Kulonprogo, Special Region of Yogyakarta. The site was selected purposively because the airport is located in a coastal area exposed to earthquake and tsunami risk, while also functioning as a strategic transportation hub and potential emergency logistics node. The case is theoretically relevant because it involves multiple actors, including airport management, BMKG, BPBD, Airnav, AVSEC, customer service, local community forums, and other operational units. This setting allows the study to examine disaster communication not only as message dissemination, but also as stakeholder coordination, information alignment, public-facing communication, and institutional learning.

Data were collected through semi-structured in-depth interviews, limited observation, and document analysis. Semi-structured interviews were used to explore participants' experiences, institutional roles, communication practices, and perceived challenges in disaster communication governance. This technique allowed the researcher to maintain a clear analytical focus while giving participants space to explain their own institutional perspectives (Berger, 2016). Each interview lasted approximately 30 to 60 minutes and was conducted after the participant gave informed consent. Interviews were recorded with participants' permission and then transcribed for coding and analysis.

Informants were selected using purposive and snowball sampling. The initial informants were identified based on their strategic involvement in disaster communication, emergency coordination, airport operation, public information, or community-level disaster preparedness. Snowball sampling was then used to reach additional actors recommended by previous participants because they were considered to have relevant experience in YIA disaster communication. The selection process continued until the interviews provided sufficient thematic coverage, and no substantially new information emerged (Pasikowski, 2022; Patton, 2015). The informants were grouped into three categories: decision-makers, operational implementers, and supporting stakeholders.

The study involved eight interview sessions with eleven informants. The decision-maker category included the Head of BMKG YIA Station, the Public Relations Manager of YIA, the Secretary of BPBD Kulonprogo, the Disaster Analyst of BPBD Kulonprogo, and the managers of Airnav YIA. The operational implementer category included the Chief Terminal Protection or AVSEC, Customer Service or Helpdesk, and safety personnel at Airnav YIA. The supporting stakeholder category included the chair and secretary of the local Disaster Risk Reduction Forum in Glagah. These informants were selected because they represented different positions in the disaster communication chain, from technical early warning, operational response, public information, passenger assistance, community coordination, to post-event evaluation.

Document analysis was conducted to examine formal and supporting materials related to disaster communication governance. The analyzed documents included standard operating procedures, local agreements, disaster management plans, contingency planning materials, crisis communication guidelines, simulation-related materials, evacuation information, and coding notes from interview data. Document analysis was used to compare formal procedures with participants' accounts and observed communication practices. Limited observation was also

conducted during field visits to understand the communication setting, public information environment, frontline service points, and the physical context of evacuation and coordination at or around YIA. Observation was limited because the study did not observe a real disaster event, but it helped the researcher understand how communication infrastructure and public-facing information were positioned in the airport context(Miles et al., 2019; Patton, 2015).

Data were analyzed using reflective thematic analysis. The process consisted of six stages. First, the researcher familiarized himself with the data by reading interview transcripts, coding notes, field notes, and documents repeatedly. Second, initial codes were generated to identify meaningful data segments related to disaster communication phases, stakeholder roles, coordination mechanisms, media channels, communication barriers, and institutional learning(Nowell et al., 2017). Third, the codes were grouped into broader categories based on their conceptual relationship. Fourth, potential themes were reviewed by comparing interview data, documents, and observation notes. Fifth, the themes were refined and interpreted using Stakeholder Management Theory and a strategic public relations perspective. Sixth, the final themes were written as analytical findings that explain how disaster communication governance is enacted at YIA.

NVivo was used to support data organization and coding consistency. The software helped the researcher organize interview transcripts, classify data sources, store coding categories, and trace relationships between codes and themes. However, NVivo was not treated as an automatic analytical tool. Interpretation remained the responsibility of the researcher because thematic meaning depends on contextual reading, theoretical sensitivity, and reflexive judgment (Braun & Clarke, 2006; Nowell et al., 2017). The coding process was both deductive and inductive. Deductive coding was guided by the research questions and concepts such as stakeholder salience, disaster communication phases, and strategic public relations. Inductive coding was used to capture emerging issues from the field, including frontline public relations, information delay, informal verification, and public anxiety.

The credibility of the findings was strengthened through source triangulation, method triangulation, limited member checking, and an audit trail. Source triangulation was conducted by comparing information from internal airport actors, technical agencies, local government, Airnav, frontline personnel, and community representatives. Method triangulation was conducted by comparing interview data with documents and limited observation. Limited member checking was carried out by confirming

selected interpretations with relevant participants when clarification was needed. An audit trail was maintained through coding notes, theme development records, and documentation of analytical decisions. These procedures were used to ensure that the findings were grounded in the data and that the interpretation remained transparent, credible, and contextually accountable (Given, 2008; Yin, 2016). The research workflow followed a sequential but iterative process. It began with problem identification and case selection, followed by informant mapping, data collection through interviews, observation, and documents, data transcription, coding, theme development, theoretical interpretation, triangulation, and conclusion drawing. This workflow was designed to show that the study moved from empirical data to conceptual interpretation in a transparent way.

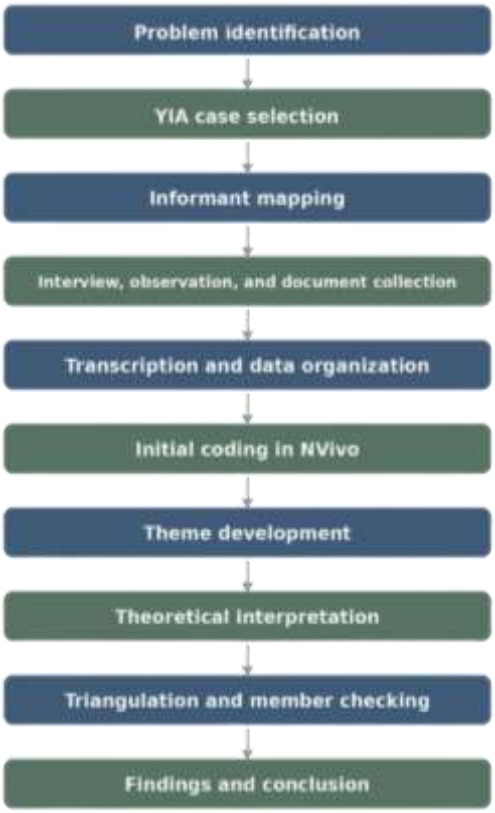

Figure 1. Research workflow of the study. Source: Author (2026)

3. Results

The findings show that disaster communication governance at Yogyakarta International Airport is formed through a multi-actor communication system that connects the airport authority, BMKG, BPBD, Airnav Indonesia, AVSEC, customer service, and local disaster risk reduction forums. The communication process is not limited to message delivery. It involves role negotiation, information verification, operational coordination, public-facing communication, and post-simulation learning. The thematic analysis generated four main findings: stakeholder role coordination, information alignment, frontline crisis communication, and institutional learning.

3.1. Stakeholder role coordination in airport disaster communication

The first finding shows that disaster communication at YIA is organized through a layered stakeholder structure. Each institution holds a different role depending on the phase of disaster management. BMKG functions as the main source of technical information related to earthquakes and tsunami potential. BPBD functions as the regional disaster coordination actor that translates technical warnings into public and community-level responses. The airport authority functions as the main institutional actor within the airport area. Airnav maintains the continuity of air navigation communication. AVSEC, customer service, and helpdesk personnel operate as frontline actors who guide passengers and manage immediate public interaction. This layered structure is supported by formal documents such as standard operating procedures, local agreements, contingency plans, emergency plans, and airport disaster management mechanisms. These documents provide role clarity and establish a formal basis for coordination. However, the findings also indicate that formal structure alone is not sufficient. Coordination becomes effective when actors understand not only their institutional roles, but also the timing, sequence, and urgency of communication during a crisis

Table 1 presents the main stakeholder roles identified in the data

Stakeholder	Main Role in Disaster Communication	Communication Function	Empirical Meaning
BMKG YIA	Provides technical information on earthquake and tsunami risk	Early warning, technical validation, risk information	Acts as the main source of scientific legitimacy

Stakeholder	Main Role in Disaster Communication	Communication Function	Empirical Meaning
Airport Authority or Angkasa Pura	Coordinates internal airport response	Command, public information, emergency coordination	Acts as the institutional center of airport crisis response
BPBD Kulonprogo	Coordinates regional disaster preparedness and response	Public warning, community coordination, contingency planning	Bridges airport communication with regional disaster governance
Airnav YIA	Maintains air navigation communication	ATC-pilot communication, operational continuity, information verification	Ensures aviation safety during emergency situations
AVSEC	Guides evacuation and passenger movement	Direct instruction, crowd control, and frontline response	Becomes the operational face of crisis communication
Customer Service and Helpdesk	Assists passengers and families	Information support, emotional reassurance, public assistance	Performs frontline relational communication
FPRB and local community actors	Supports community preparedness and evacuation	Local warning, socialization, and community mobilization	Connects airport disaster preparedness with surrounding communities

Source: Results of the interview data analysis (Author, 2026)

The table shows that disaster communication at YIA depends on distributed authority. No single actor controls the whole communication process. Instead, each stakeholder becomes salient at different moments. BMKG becomes central during early warning. Airport authority becomes

central during institutional decision-making. AVSEC and customer service become central during direct passenger response. BPBD and FPRB become central when the emergency involves surrounding communities.

3.2. Information alignment and verification

The second finding concerns the importance of information alignment. In a high-risk airport environment, the credibility of public communication depends on whether internal information has been verified and synchronized before being delivered to passengers, staff, media, or the surrounding community. The data show that YIA uses several communication channels, including radio, HT, telephone, AFTN, announcement systems, FIDS, WhatsApp groups, contact center 172, and direct coordination between units.

The use of multiple channels shows that YIA has developed a redundant communication structure. This is important because disaster events can disrupt electricity, internet access, or regular communication systems. However, the findings also reveal that redundancy does not automatically remove communication barriers. Several informants indicated that frontline actors sometimes wait for confirmation from higher coordination nodes before communicating with passengers. This creates a tension between accuracy and speed. On one side, crisis communication requires verified information. On the other side, passengers need fast and clear instructions during uncertainty. The findings indicate that information alignment at YIA follows three patterns. First, technical information is validated by specialized actors, especially BMKG and Airnav. Second, operational information is coordinated through airport command structures such as AOCC, AOCH, AOLT, or internal management lines. Third, public information is delivered through formal spokespersons, announcement systems, contact centers, frontline staff, and social media. These patterns show that information alignment is not only a technical process. It is also a public relations process because it determines whether organizational messages appear consistent, credible, and reassuring.

3.3. Frontline crisis communication

The third finding shows that frontline personnel play a strategic role in disaster communication. AVSEC, customer service, helpdesk, and other terminal personnel are not formally labeled as public relations officers. However, in crisis situations, they become the first organizational actors encountered by passengers. They guide evacuation, answer questions, calm anxious passengers, assist vulnerable groups, and translate institutional instructions into direct public communication. This finding is important because the public often evaluates an organization through

direct interaction during a crisis. If passengers receive unclear, inconsistent, or emotionally insensitive information, they may perceive the airport as unprepared.

Conversely, if frontline actors communicate clearly, calmly, and empathetically, they can reduce panic and strengthen trust. Therefore, frontline communication at YIA should be understood as part of crisis public relations practice. The data also show that frontline communication involves emotional labor. Customer service and helpdesk personnel are expected to manage passenger anger, fear, confusion, and uncertainty. In disaster or emergency settings, their role is not only informational but also relational. They need to provide accurate information while maintaining calmness, empathy, and authority. This makes frontline actors central to organization-public relationships during airport disaster communication.

3.4. Institutional learning through simulation and evaluation

The fourth finding shows that simulation and evaluation are central to institutional learning. YIA and its stakeholders conduct emergency drills, preparedness exercises, siren tests, evacuation simulations, and coordination meetings. These activities help actors understand roles, test communication channels, and identify weaknesses in infrastructure or coordination. The data indicate that simulation has produced practical improvements. For example, previous experiences of passenger panic encouraged the development of disaster education videos in the airport. BPBD and local community actors also identified the need for clearer evacuation maps, additional access gates, better signs, and more frequent joint simulations. Airnav emphasized the importance of testing communication continuity. AVSEC highlighted the need for visible evacuation guidance when electricity goes out. Customer service emphasized the need for clearer coordination flow from managers to frontline staff.

These findings show that institutional learning occurs when simulation is followed by evaluation and corrective action. However, learning is not yet fully complete. Some gaps remain, such as the need for more operational crisis communication SOPs, more inclusive public education, better visual communication, more accessible evacuation routes, and more systematic involvement of surrounding communities.

3.5. Public relations risks across disaster communication phases

The findings also show that each disaster communication phase contains specific public relations risks. These risks are not limited to operational failure. They also include message inconsistency, public confusion, delayed confirmation, panic, misinformation, and weak public understanding of technical terms.

Table 2. Disaster Communication Phases

Disaster Communication Phase	**Main Communication Risk**	**Main Communication Risk**	**Strategic Public Relations Response**	**Expected Outcome**
Preparedness	Risk information remains internal and is not fully understood by passengers or the surrounding communities	Airport authority, BMKG, BPBD, FPRB	Strengthen public education, visible evacuation information, videos, maps, and routine socialization	Increased preparedness and risk awareness
Early warning	Technical warnings may not be immediately understood by non-expert publics	BMKG, BPBD, airport command units	Translate technical data into simple, clear, and actionable messages	Reduced uncertainty
Emergency response	Passengers may panic due to unclear directions or delayed information	AVSEC, customer service, helpdesk, operational units	Deliver direct, repeated, and empathetic instructions	Public calmness and compliance
External coordination	Different institutional priorities may create fragmented messages	Airport authority, BPBD, Airnav, TNI, Polri, local government	Align messages through the coordination center and clear spokespers	Stakeholder trust and coordinated response

Disaster Communication Phase	Main Communication Risk	Main Communication Risk	Strategic Public Relations Response	Expected Outcome
			on structure	
Recovery and evaluation	Lessons may not be institutionalized into updated procedures	Airport authority, BPBD, BMKG, Airnav, frontline units	Conduct debriefing, update SOP, improve training, and document lessons learned	Adaptive preparedness and stronger legitimacy

Source: Results of the interview data analysis (Author, 2026)

Disaster communication governance at YIA is shaped by the interplay between formal procedures, stakeholder coordination, frontline communication, and learning practices. The main challenge is not the absence of disaster communication mechanisms, but the need to strengthen the integration between technical risk information, operational command, public messaging, and relational communication.

4. Discussion

The results indicate that disaster communication governance at Yogyakarta International Airport should be understood as a strategic public relations process. Public relations in this context is not limited to media relations or formal spokesperson activity. It functions as communicative governance that connects stakeholder coordination, information alignment, public trust, and institutional legitimacy. This finding responds to the need to move beyond a narrow view of crisis communication as message delivery. Crisis communication in high-risk infrastructure requires relational coordination because the public evaluates the organization not only from what it says, but also from how it organizes, verifies, and humanizes information during uncertainty(Ma et al., 2023; Tam & Mehta, 2025).

The YIA case confirms the relevance of Stakeholder Management Theory in crisis contexts. Stakeholder salience is not fixed. It changes according to the phase of disaster communication. BMKG becomes central

when technical risk information is needed. This is shown by the BMKG informant, who stated that its main role is "memberikan informasi terkait bencana ke pihak bandara" through radio and AFTN. This quotation shows that BMKG holds technical legitimacy during early warning. However, when the crisis moves to evacuation, the salience shifts to AVSEC and other frontline officers. The AVSEC informant explained that when a disaster occurs, "kami sebagai AVSEC… akan mengonfirmasi ke jajaran di bawah untuk melakukan evakuasi." This indicates that AVSEC holds operational power and urgency because it directly guides passenger movement.

This dynamic confirms Freeman & Harrison (2019) argument that stakeholder relationships must be understood through power, legitimacy, and urgency. In the YIA case, these three attributes are distributed across actors. BMKG owns scientific legitimacy. The airport authority owns organizational authority. BPBD owns regional disaster governance legitimacy. AVSEC and customer service have direct relational access to passengers. Therefore, airport disaster communication cannot be controlled only through one organizational center. It requires a coordinated network where each actor knows when to lead, when to support, and when to verify information.

The findings also support organization-public relationship scholarship. Ma et al. (2023) argue that organization-public relationships influence trust, public attitudes, and behavioral outcomes. In airport disaster communication, this relationship is tested through public-facing interaction. During normal conditions, passengers may evaluate an airport through facility quality or service efficiency. During a disaster, the basis of evaluation changes. Passengers evaluate whether the airport gives clear instructions, communicates empathy, and appears coordinated (Grober, 2003). This is reflected in the customer service informant's statement: "Kita sebagai customer service harus menenangkan." Another customer service statement explains the division of authority: "kalau untuk informasi A1 kita biasanya ada konferensi pers dari general manager... Kalau dari kita cukup menenangkan penumpang atau korban." These statements show that crisis communication is divided between official authority and emotional reassurance. Both are necessary for maintaining trust.

This finding extends the meaning of public relations in crisis. Formal public relations units may manage media, official statements, and public information. However, frontline actors perform relational public relations because they become the immediate interface between the organization and the publics. Fannes & Claeys (2022) show that verbal

empathy in crisis affects organizational reputation because the public judges whether an organization expresses concern. The YIA case supports this argument. Empathy is not only found in press releases or spokesperson statements. It is also performed through face-to-face communication by customer service, helpdesk, AVSEC, and terminal officers. Therefore, the concept of frontline public relations is relevant for airport disaster communication.

The discussion also shows that information alignment is central to crisis credibility. Crisis and emergency risk communication literature emphasizes that effective communication must be accurate, timely, consistent, and actionable (Reynolds & Seeger, 2005; Sellnow & Seeger, 2013). The YIA data show that actors are aware of this need. Airnav informants explained that information must be checked before being delivered to leadership and external actors. One Airnav statement says that information must be "checked and rechecked… sampai ke data yang paling valid." This practice shows that crisis communication at YIA prioritizes verification. However, it also reveals a critical tension. Verification can protect credibility, but it may slow down public communication if frontline actors wait too long for confirmation.

This tension is also visible in customer service data. The informant explained that when telephone information is not accurate, customer service may directly approach AOLT or AOCH "biar kita tidak terjadi tumpang tindih." This shows that frontline actors sometimes need informal verification to prevent message overlap. From a public relations perspective, this is important because inconsistency can damage public trust. Coombs (2023) argues that crisis communication requires message consistency and coordinated responsibility. In the YIA case, consistency depends not only on official statements but also on the ability of internal units to synchronize information before it reaches passengers.

The findings also resonate with studies on disaster communication in Indonesia. Dougall et al. (2008) show that disaster communication in Indonesia requires clear media centers, trained communicators, consistent messages, and coordination across government and non-government actors. The YIA case reflects the same need, although the context is different. In the airport setting, the crisis communication center must connect operational command, technical warning, media response, passenger assistance, and frontline messaging. The public relations manager at YIA explained that during a crisis, the public relations unit becomes "pusat informasi internal dan eksternal" and manages crisis communication, emergency information, and media relations.

This confirms that PR is not peripheral. It is part of the governance structure that controls how crisis information is collected, validated, and communicated. The uploaded disaster communication literature also strengthens this interpretation. Yulianto et al. (2020) found that communication technology support, such as two-way radio, satellite phones, and mobile BTS, became crucial during the Palu disaster because electricity and communication infrastructure were disrupted. This is relevant to YIA because several informants emphasized the importance of radio, HT, telephone, AFTN, and backup communication channels. BMKG stated that radio is the most important channel because it can function when other communication systems are down. Airnav also emphasized that HT must remain on and that communication tools require primary and secondary backups. The synthesis suggests that airport disaster communication must not rely on one channel. It needs redundancy, but redundancy must be integrated with clear coordination procedures.

The YIA case also aligns with Selamet (2019) argument that risk communication should not rely only on one-way technical communication. Risk communication works better when it combines technical information with public participation and cultural understanding. This is visible in the role of FPRB Glagah. The FPRB informants mentioned the use of kentongan, WhatsApp, and HT as local communication channels. Kentongan represents a community-based warning system that is culturally familiar and accessible. This finding is important because not all the public will access official digital platforms during emergency situations. Community-based channels can bridge formal warning systems with local understanding. Therefore, disaster communication governance at YIA should include not only institutional actors, but also local community actors around the airport.

The importance of public education is also supported by Khair et al. (2021), who found that videos and booklets significantly increased earthquake and tsunami preparedness among coastal communities. This supports the YIA practice of using disaster simulation videos in the airport. The BMKG informant explained that the video is played in the waiting area so visitors can understand what to do during earthquakes and tsunamis. From a public relations perspective, this video is not merely educational material. It is a preparedness communication tool that helps reduce panic before a crisis occurs. It also shows organizational care and responsibility because the airport attempts to communicate risk in a form that passengers can easily understand.

However, the findings also reveal a critical limitation in public risk communication. The public relations manager noted that "masyarakat umum tidak mengerti akan bahasa-bahasa yang kita pergunakan." This indicates that technical language remains a barrier. BPBD also recognized a communication dilemma. Too much risk information may cause fear, but too little information may leave people unprepared. This tension is consistent with risk communication literature, which argues that public messages must balance accuracy, clarity, and emotional sensitivity (Reynolds & Seeger, 2005; Selamet, 2019). In the YIA context, this means that crisis messages should be simple, visual, multilingual when needed, and repeatedly delivered through both digital and face-to-face channels.

The findings further show that disaster communication governance is shaped by institutional fragmentation and coordination boundaries. Sufri & Lassa (2024) found that disaster risk reduction and climate adaptation in Aceh faced challenges due to fragmented policies, coordination gaps, limited political commitment, and weak community participation. Although their case differs from YIA, the problem of fragmentation is relevant. In YIA, fragmentation appears in the separation between the airport authority, the regional disaster management authority, the air navigation authority, and community actors. BPBD informants acknowledged that the airport has its own authority and sometimes appears rigid. One BPBD statement says, "kadang-kadang bandara itu kan otoritasnya kaku." This indicates that formal authority can become both a source of clarity and a source of coordination difficulty. Therefore, disaster communication governance requires mechanisms that can bridge institutional boundaries before a real crisis occurs.

Institutional learning becomes the main answer to this challenge. The data show that simulations, siren tests, emergency drills, and coordination meetings help stakeholders build shared understanding(Abdullah et al., 2021). BMKG explained that early simulations created confusion, but repeated simulations helped actors understand their roles. AVSEC also stated that coordination has worked well because units often conduct simulations and "saling bahu-membahu." This supports high-reliability organization literature, which emphasizes rehearsal, mindfulness, redundancy, and learning as key principles for organizations operating in hazardous environments (Howe et al., 2023; Jahn, 2021). YIA, as a high-risk airport infrastructure, needs this kind of learning because disaster communication failure can affect passenger safety, operational continuity, and institutional legitimacy.

At the same time, the findings show that institutional learning must become more operational. Several informants identified unresolved issues,

including locked emergency gates, limited evacuation guidance during blackout, public misunderstanding of evacuation maps, and untested communication disruption scenarios. AVSEC recommended luminous floor guidance because evacuation signs may not be visible if electricity fails. BPBD identified emergency gates that may delay community evacuation if they remain locked. Airnav stated that full communication disruption has not been tested. These findings suggest that the next stage of learning should move from routine simulation to stress-test simulation. This means testing the system under more difficult conditions, such as power failure, communication breakdown, passenger panic, night evacuation, and misinformation spread(Koch & Viererbl, 2026; Price & Forrest, 2016; Sivakumar, 2022).

Based on the synthesis, this study proposes that disaster communication governance at YIA consists of four interconnected dimensions. First, stakeholder relationship management clarifies authority, responsibility, and trust between actors. Second, information alignment ensures that technical and operational information is verified before it becomes public communication. Third, frontline crisis communication translates verified information into calm, clear, and empathetic instructions for passengers and affected publics. Fourth, institutional learning transforms simulation, errors, and evaluation into improved protocols and communication capacity. These four dimensions produce three relational outcomes: public trust, stakeholder legitimacy, and adaptive preparedness.

Figure 2 Strategic Public Relations Governance Model in Airport Disaster Communication. Source Author synthesis (2026)

Figure 2 visualizes the conceptual synthesis of the findings. The model shows that disaster communication governance at YIA begins with stakeholder relationship management, followed by information alignment, frontline crisis communication, and institutional learning. These four dimensions are not separate processes, but mutually connected practices that shape relational outcomes, including public trust, stakeholder legitimacy, and adaptive preparedness. The conceptual implication is that airport disaster communication should be studied not only as emergency management, but also as strategic public relations governance(Freeman & Harrison, 2019; Zhao et al., 2024).

The practical implication is that YIA needs an integrated crisis communication mechanism that connects airport command, BMKG technical warnings, BPBD regional coordination, Airnav operational continuity, public relations media management, and frontline passenger communication. This mechanism should include clearer crisis communication SOPs, routine joint simulations, frontline communication training, visual risk education, inclusive communication for elderly passengers, and formal community engagement with FPRB and surrounding villages. Its main challenge lies in translating technical information into public-facing messages, reducing coordination delays, strengthening frontline authority, and integrating community-based warning systems with airport crisis communication. Therefore, strategic public relations in this context should be understood as the governance of relationships, messages, authority, and trust under conditions of risk.

5. Conclusion

This study demonstrates that stakeholder coordination in disaster communication at Yogyakarta International Airport represents a strategic public relations practice. Coordination is not merely the implementation of formal procedures. It is a communicative process involving stakeholder relationship management, information alignment, empathetic crisis messaging, and institutional learning. These findings confirm that public relations in critical infrastructure plays a constitutive role in crisis governance, shaping how organizations interpret risk, align decisions, communicate with publics, and maintain legitimacy under pressure.

The theoretical contribution of this study lies in integrating Stakeholder Management Theory with strategic public relations. The findings reveal that stakeholder power, legitimacy, and urgency are fluid during crises and that organization-public relationships are influenced not only by campaigns or media relations but also by the credibility and empathy exhibited during emergency response communication. This

supports the broader argument that relational management is central to public relations theory and practice. Practically, this study recommends that airport organizations implement an integrated crisis communication architecture that links operational command, stakeholder coordination, and public messaging. Specific recommendations include:

1. Establishing cross-institutional protocols for aligned information sharing among BMKG, BPBD, Airnav, AVSEC, and airport management.
2. Training frontline actors such as customer service, helpdesk, and AVSEC officers as crisis public relations agents capable of translating technical risk information into clear and empathetic guidance.

Conducting regular simulations and drills incorporating public messaging scenarios, passenger evacuation, and multi-channel communication to enhance institutional learning and preparedness. These measures are consistent with disaster communication literature emphasizing accurate information, coordinated messaging, trained communicators, and continuous learning. The limitation of this study lies in its focus on a single airport case. Therefore, the findings should be interpreted contextually and cannot be generalized statistically to all airports. However, they provide a conceptual framework that can guide other high-risk infrastructure organizations.

Future research may compare multiple airports or other critical infrastructure sites to examine whether the proposed strategic public relations governance model is applicable across different institutional and cultural contexts. Researchers may also analyze digital communication traces and real-time public messaging during disasters to understand how speed, consistency, and credibility influence public trust. Additionally, future studies could investigate the role of communication technology and live video coordination in supporting coordination among frontline actors, emergency dispatchers, and institutional decision-makers.

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