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The Philippine Coast Guard Crisis Planning towards the Development of a Continuity Management Framework

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ABSTRACT

Public institutions must sustain essential services even when the disruption also impairs their own personnel, facilities, communications, logistics, records, and command arrangements. This study assessed Public Service Continuity (PSC) in Philippine Coast Guard (PCG) crisis planning and developed an evidence-informed proposed continuity plan. Anchored in Continuity Management Theory, complemented by Continuity of Operations and ISO 22300/22301, the study operationalized PSC through Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy (5Rs). An explanatory sequential mixed-methods design was used. A 33-item survey of 306 PCG personnel from National Headquarters and three Coast Guard Districts established the PSC profile. Fifteen Key Informant Interviews explained the quantitative pattern through Narrative Analysis, while 15 LOIs, OPLANs, IMPLANs, and related planning documents were assessed using a 5R documentary matrix. Findings were integrated through a joint display and Strength–Gap Matrix. Overall PSC was Slightly Manifested (M = 2.44, SD = 0.62). Responsibilities (M = 2.53) and Risk Assessment (M = 2.52) were Manifested, reflecting stronger succession, delegation, role assignment, hazard identification, and hazard-to-essential-function linkage. Resources (M = 2.33), Recovery (M = 2.39), and Restoration of Normalcy (M = 2.42) were Slightly Manifested. Interviews and documents showed that the PCG mobilizes personnel and sustains immediate response through command experience, coordination, and local adaptation; however, continuity remained insufficiently institutionalized in essential-function prioritization, minimum service levels, dependency mapping, alternate resources, recovery targets, knowledge transfer, corrective-action closure, and retesting. The study proposes a PSC Architecture and the Assess–Assure–Assign–Recover–Restore (A3R2) Continuity Management Framework, operationalized through illustrative OPLAN "KATATAGAN." These outputs complement existing crisis plans by adding a managed continuity layer. The study offers PCG leadership a basis for strengthening sustained maritime public service under disruption.

Keywords: *public service continuity, Philippine Coast Guard, continuity management, crisis planning, explanatory sequential mixed-methods research*

INTRODUCTION

Public institutions operate in environments where disruption is no longer exceptional. Natural hazards, technological failures, public-health emergencies, cyber incidents, security threats, and

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geopolitical crises can simultaneously impair personnel availability, leadership, facilities, communications, records, logistics, and public confidence. Across jurisdictions, crisis planning has therefore evolved beyond immediate emergency response. Institutions must not only activate command structures, mobilize resources, contain hazards, and restore damaged operations; they must also sustain their essential functions, lawful authority, accountability, and public-service obligations while operating under degraded conditions (Cedergren & Hassel, 2025; Whitworth, 2006).

This distinction is central to contemporary continuity practice. Emergency or crisis plans commonly organize the first actions required after an incident: incident command, personnel deployment, asset mobilization, hazard containment, and operational recovery. These functions are necessary, but they do not by themselves establish whether an institution can continue delivering its mission-essential services when its own operating capacity has been disrupted. Plans may prescribe a sequence of response actions without identifying minimum service levels, continuity priorities, alternate facilities, continuity communications, delegated authorities, critical records, personnel contingencies, or recovery objectives. They may also exist without sufficient resourcing, exercising, review, or integration into routine management and decision-making (Cedergren & Hassel, 2025).

Continuity of Operations provides one foundation for addressing this institutional problem. It concerns the arrangements required to maintain critical functions during disruption, including identification of mission-essential functions; succession and delegation of authority; alternate facilities; continuity communications; protection of vital records; human-capital readiness; devolution of control; and reconstitution of normal operations (Petersen, 2004; Whitworth, 2006). Continuity Management extends this operational focus by embedding continuity in risk assessment, resource planning, recovery objectives, leadership accountability, testing, evaluation, and continuous improvement (Sharp, 2012). International continuity standards complement these approaches. ISO 22300 defines continuity as the ability to continue delivering products or services at acceptable predefined levels following a disruptive incident (International Organization for Standardization, 2018a), while ISO 22301 specifies requirements for a business continuity management system integrated with the organization's broader management system (International Organization for Standardization, 2019; Raevsky, 2023). Public-sector organizations have adopted such approaches to sustain public-service performance during crises (Alghamdi, 2022; Raković, 2024).

Applied to government, continuity becomes more than the preservation of organizational activity. Public Service Continuity is the institutional capability to sustain essential public functions, preserve legitimate authority and accountability, recover according to defined priorities, and resume stable operations while learning from disruption (Cedergren & Hassel, 2025). It treats continuity not as a stand-alone emergency document, but as a continuing governance and management capability. This framing is especially important for agencies whose failure to operate during a crisis directly affects public safety, security, environmental protection, or the delivery of life-saving services.

In the Philippines, this capability has been institutionalized through the Public Service Continuity Planning framework. NDRRMC Memorandum Circular No. 33, series of 2018, and its implementing guidebook established the national policy basis for public service continuity planning (National Disaster Risk Reduction and Management Council, 2018; National Disaster Risk Reduction and Management Council & Office of Civil Defense, 2022). The Civil Service Commission subsequently operationalized the directive through Memorandum Circular No. 2, series of 2021, directing national government agencies, local government units, government-owned or controlled corporations with original charters, and state universities and colleges to prepare Public Service Continuity Plans (Civil Service Commission, 2021). The framework adopts an all-hazards orientation and emphasizes internal capability, recovery needs, leadership succession, and continued delivery of government services during disruption (Luci-Atienza, 2021). It organizes continuity planning around five interconnected dimensions: Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy.

These concerns are particularly salient in the Philippine archipelagic environment. The country's location on the Pacific Ring of Fire and within the typhoon belt exposes public institutions to recurrent earthquakes, volcanic eruptions, floods, and tropical cyclones (Holden et al., 2017; Luchi et al., 2019). Maritime institutions must operate amid these natural hazards while also confronting maritime accidents, oil spills, piracy and kidnapping-for-ransom in the Sulu Sea and adjacent sea lanes, vulnerabilities in vessel and port systems, and growing geopolitical pressure in the South China Sea (Chan & Ho, 2007; Newberry, 2014; Oxford Analytica, 2020; Putra, 2023; Aguilar et al., 2025; Bacosa et al., 2025). In this setting, disruption can be prolonged, geographically dispersed, and concurrent across several operational domains. The institutional question is therefore not only whether agencies can respond to a crisis, but whether they can sustain their essential functions while the crisis disrupts the very resources needed to perform them.

The Philippine Coast Guard (PCG) illustrates this challenge. Created under Republic Act No. 9993, the PCG is the country's principal maritime law-enforcement and humanitarian service institution. Its statutory mandate includes promoting maritime safety and security, protecting the marine environment, conducting search and rescue, enforcing applicable maritime laws, and supporting national disaster response (Republic Act No. 9993, 2009). PCG personnel likewise describe their work in terms of protecting marine resources and the environment, safeguarding lives and property at sea, and supporting maritime-law enforcement (Abad et al., 2023). These functions must be delivered across a dispersed archipelagic territory and often under conditions in which personnel, mobility, communications, facilities, supplies, and leadership arrangements may themselves be affected. Accounts of PCG rescue personnel operating through successive major typhoons, including Odette, underscore the human and organizational strain of sustaining operations in recurrent emergencies (Ababat, 2023).

The PCG maintains Crisis Action Plans and related operational plans for a range of hazards and contingencies. Their existence, however, does not by itself demonstrate Public Service Continuity capability. A crisis plan may support incident response without specifying how the organization will sustain minimum mission-essential services during an enterprise-wide or protracted disruption. It may not establish continuity priorities, alternate operating arrangements, succession and delegation mechanisms, resource redundancies, recovery time objectives, or processes for incorporating lessons learned. Assessing whether PCG crisis planning is aligned with Public Service Continuity is therefore necessary to determine whether the organization is prepared not only to respond to disruption, but also to continue performing its statutory functions through it.

Although the PCG, as an armed and uniformed service, is not the direct addressee of the Civil Service Commission issuance, this does not preclude it from adopting a Public Service Continuity Plan. Doing so would align its continuity arrangements with the government-wide framework and may strengthen clarity of continuity priorities, succession preparedness, and institutional recovery capacity (Luci-Atienza, 2021). For an agency whose mandates are life-saving, environmental, security-related, and operationally distributed across the country, continuity planning is not an administrative add-on; it is an operational requirement.

Accordingly, this study evaluates PCG crisis planning through the single measurable construct of Public Service Continuity. Grounded in Continuity of Operations, Continuity Management, and ISO 22300/22301, the study operationalizes the Philippine framework's five dimensions – Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy (the 5Rs) – as the sole dimensions for empirical assessment. The quantitative component assesses the level at which these dimensions are manifested in PCG crisis planning, while the qualitative component examines their implementation, the experiences of relevant personnel, and the organizational enablers and constraints affecting continuity. Integrating the two strands will identify institutional strengths and systemic gaps and provide an empirical basis for a PCG Public Service Continuity Plan suited to its statutory mandates, command structure, operational diversity, and archipelagic operating environment.

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Theoretical Framework

This study is based on the complementary use of three theoretical bases: Continuity of Operations (Petersen, 2004; Whitworth, 2006), Continuity Management (Sharp, 2012) and international continuity standards, ISO 22300 and ISO 22301 (International Organization for Standardization, 2018a, 2019). This convergence explains Public Service Continuity (National Disaster Risk Reduction and Management Council, 2018; Civil Service Commission, 2021). These foundations are not variables to be measured independently. Instead, they set out why Public Service Continuity requires operational survivability, institutional governance and an internationally recognized capability benchmark.

Continuity of Operations refers to the means by which an institution maintains and continues its mission critical functions when normal arrangements are interrupted. It started with government-survivability planning and has since expanded to include terrorism, natural hazards, cyber incidents and infrastructure failure (Petersen, 2004). Its principal concerns include the identification and prioritization of essential functions, orders of succession, delegations of authority, alternate facilities, continuity communications, protection of essential records, human-capital readiness, devolution, and reconstitution (Whitworth, 2006). In the PCG context, these mechanisms are used to secure command authority and to maintain maritime safety, security, environmental protection, and search-and-rescue services even when normal capabilities are impaired.

Continuity Management is the process of institutionalizing continuity. It is a continuous Plan-Do-Check-Act cycle (Sharp, 2012) that integrates risk and impact assessment, continuity strategies, resource allocation, leadership accountability, performance evaluation, exercises, corrective action, and continuous improvement into organizational governance. It addresses the risk that continuity plans exist only as compliance documents, not adequately funded, owned, tested, reviewed or integrated into operations, a problem of maturity that is repeatedly documented in the public sector continuity literature (Cedergren & Hassel, 2025).

The third foundation is the international continuity standards that codify continuity into a formal, auditable framework. The ISO 22300 series offer a recognized framework for business continuity management and a common vocabulary for security and resilience (Raković, 2024; International Organization for Standardization, 2018a), whereas ISO 22301 specifies the requirements for a business continuity management system and integrates it into the organization's overall management system (International Organization for Standardization, 2019; Raevsky, 2023). These standards are directly relevant to the public sector, where organizations have specifically adopted ISO 22301 based systems to preserve the efficiency of public service performance in the face of crises (Alghamdi, 2022). ISO 31000 provides the international standard for risk management (International Organization for Standardization, 2018b) to support these continuity standards, with the principles and guidelines – widely used as a transition from compliance-oriented to performance-oriented risk management – that have an influence on the Risk Assessment dimension (Dali & Lajtha, 2012). While ISO 22300 and ISO 22301 deal with the continuity capability itself, ISO 31000 deals with the upstream discipline of understanding the risks that continuity must address, and integrating risk management with business continuity enhances organizational resilience (Zambrano-Ortiz, 2023).

The convergence of these three foundations creates the Public Service Continuity capability. Continuity of Operations supplies the operational requirements; Continuity Management supplies the governance system that sustains those requirements; and the ISO standards supply an internationally recognized, certifiable benchmark against which that capability can be defined, assessed, and improved. The convergence considers Public Service Continuity as an institutional capacity, rather than an emergency document in itself (Cedergren & Hassel, 2025). In the Philippine public sector, the resulting capability is operationalized through the 5Rs framework (National Disaster Risk Reduction and Management Council, 2018; Civil Service Commission, 2021). Hence Risk Assessment, Resources, Responsibilities, Recovery and Restoration of Normalcy become the dimensions of the study that can be measured.

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Figure 1.1 illustrates how the three theoretical foundations – each identified with its principal proponents – converge toward Public Service Continuity as the central construct of the study.

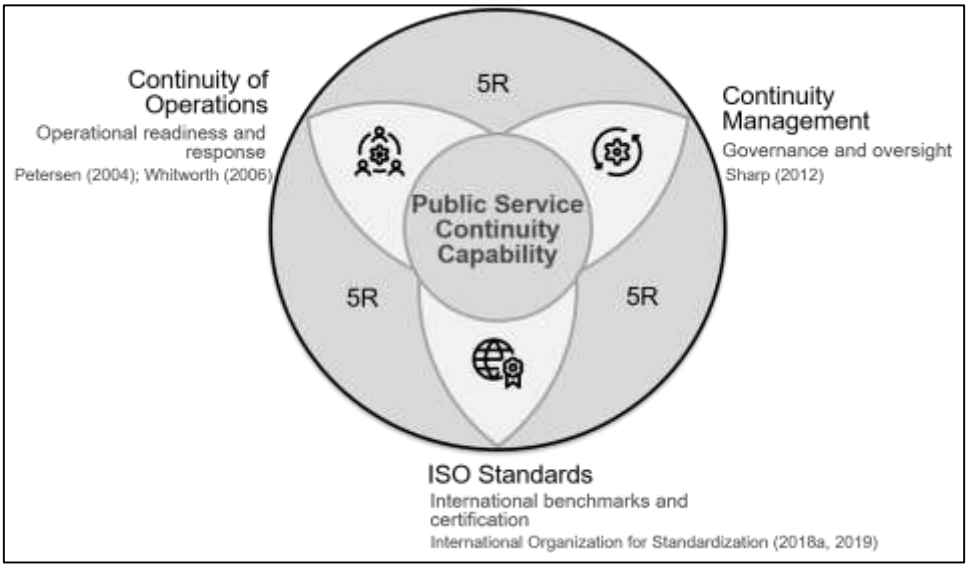


Figure 1.1 *Theoretical Framework*

Conceptual Framework

The conceptual framework illustrates a process from basic evaluation to actual institutional policy, step-by-step, showing how the PCG goes from isolated emergency response to full organizational resilience. The assessment begins at baseline with the current PCG Crisis Action and Operational Plans, which represent the current operational posture of the agency. These plans are assessed directly through the 5R Framework – Risk Assessment, Resources, Responsibilities, Recovery and Restoration of Normalcy. The framework uses the 5Rs as the main operational lens to benchmark existing institutional capabilities against national continuity policy requirements, rather than measuring abstract concepts in isolation.

The empirical results of the 5R assessment directly feed into the core construct of Public Service Continuity. This core tier is theoretically underpinned by Continuity of Operations, Continuity Management and ISO 22300/22301 standards, which collectively define three critical operational dimensions, Implementation (shaped by Leadership Influence), Factors (analyzing Enablers & Barriers) and the overall operational Framework (PSC Benchmark). The use of quantitative indicators and qualitative perceptions in these dimensions allows theoretical continuity principles to be applied directly to the specific operational realities of a maritime uniformed service.

The strength-gap matrix, integrated at the top of the framework, provides actionable design requirements that result in the proposed PCG Public Service Continuity Management Framework. This linear, bottom-up design guarantees full methodological rigor: empirical evidence obtained from actual crisis plans guides the structural assessment, theoretical dimensions explain the organizational enablers and constraints and the final output directly address the identified institutional gap. The model establishes a direct chain of evidence from initial baseline plans to a formalized framework, providing a clear and actionable pathway for sustaining essential maritime functions under degraded conditions.

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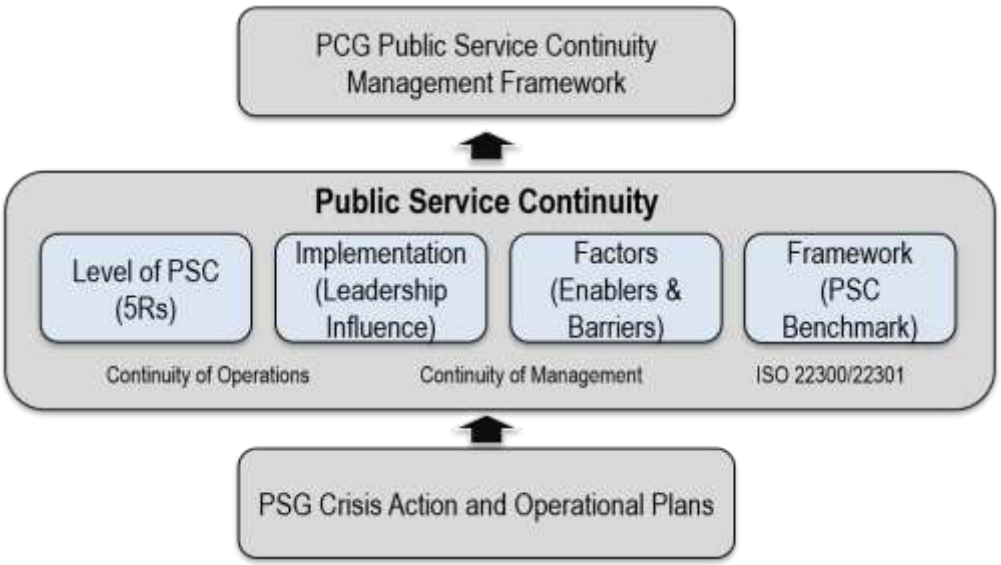


Figure 1.2 *Conceptual Framework*

This study employed an Explanatory Sequential Mixed-Methods Research Design, in which the quantitative phase was conducted first and the qualitative phase followed to explain, validate, and contextualize the quantitative results. This design was appropriate because the study first sought to determine the level at which Public Service Continuity mechanisms are manifested in the Philippine Coast Guard (PCG) crisis-planning framework and then sought to explain the institutional conditions, implementation experiences, and operational realities underlying the observed results. The design therefore proceeded from quantitative measurement to qualitative explanation, with integration occurring during the interpretation of findings and the development of the proposed Public Service Continuity Management Framework (PSCMF).

The study was anchored on the Philippine Public Service Continuity Planning framework under NDRRMC Memorandum Circular No. 33, series of 2018. Public Service Continuity capability was operationalized through the five interconnected dimensions of Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy, collectively referred to as the 5Rs. These dimensions operationalized the theoretical foundations of Continuity of Operations (COOP) and Continuity Management Theory (CMT). The study was further informed by ISO 22300, which provides the vocabulary for security and resilience, and ISO 22301, which specifies requirements for a business continuity management system. Together, these foundations emphasize continuity governance, risk-based planning, organizational resilience, and the sustained delivery of essential services during and after disruption.

The quantitative phase addressed Research Question 1. A survey questionnaire was administered to 306 PCG respondents to measure the extent to which the five dimensions of Public Service Continuity are manifested in the existing PCG crisis-planning framework. The instrument used a four-point Likert scale, enabling respondents to assess the manifestation of specific continuity indicators under each of the 5Rs. Frequency distributions, weighted means, standard deviations, and rankings were used to describe the respondents' assessments. Weighted means determined the level of manifestation of each indicator and continuity dimension; standard deviations indicated the consistency or dispersion of respondents' perceptions; and rankings identified the comparatively stronger and weaker dimensions of Public Service Continuity within the existing framework.

The quantitative findings were complemented by document analysis of actual PCG planning and operational documents. The documents examined included Operations Plans (OPLANs), Letters of

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Instruction (LOIs), and implementing plans (IMPLANs) from the National Headquarters (NHQ), Coast Guard District Southwestern Mindanao (CGD SWM), Coast Guard District Central Visayas (CGD CV), and Coast Guard District National Capital Region–Central Luzon (CGD NCR-CL). This analysis examined the extent to which formal PCG plans and directives incorporate the 5Rs and the related principles of COOP, CMT, ISO 22300, and ISO 22301. It also enabled comparison between personnel perceptions of the manifestation of continuity mechanisms and the provisions formally prescribed in institutional documents.

The qualitative phase was undertaken after the survey results had been analyzed. It addressed Research Questions 2 and 3 through Key Informant Interviews (KIIs) with senior PCG leaders, continuity planners, and subject-matter experts who possessed direct knowledge of crisis planning, organizational continuity, emergency management, and operational decision-making. For Research Question 2, the KIIs examined the institutional factors that influence the implementation of Public Service Continuity within the PCG. These factors included leadership commitment, governance arrangements, policy implementation, resource availability, inter-unit coordination, succession and delegation arrangements, communications, operational constraints, and recovery practices. The interviews were intended to explain why particular continuity dimensions were more or less manifested in the survey results and to identify the organizational conditions affecting their implementation.

For Research Question 3, KIIs explored the practical requirements, institutional priorities, and operational considerations for developing a PCG Public Service Continuity Management Framework. This inquiry was supported by document analysis of relevant international and national continuity literature, standards, policies, and planning guidance. The analysis drew on COOP and Continuity Management principles, ISO 22300 and ISO 22301, the Philippine Public Service Continuity Planning framework, and other applicable national and international references. These materials were used to identify continuity-plan elements that are theoretically sound, policy-aligned, and adaptable to the PCG's statutory mandates, command structure, operational diversity, and archipelagic operating environment.

Integration occurred at the interpretation stage. Survey findings established the measured level of manifestation of Public Service Continuity across the five dimensions. The document analysis examined whether and how those dimensions were embedded in actual PCG OPLANs, LOIs, and IMPLANs. The KIIs then explained the institutional and operational realities behind the quantitative patterns and identified the planning requirements for strengthening continuity capability. The integrated findings were organized into a Strength–Gap Matrix, which linked measured continuity levels, documentary evidence, and key-informant explanations. This matrix served as the empirical basis for developing the proposed PCG Public Service Continuity Plan (PSCP).Thus, the paradigm follows this structured logic:

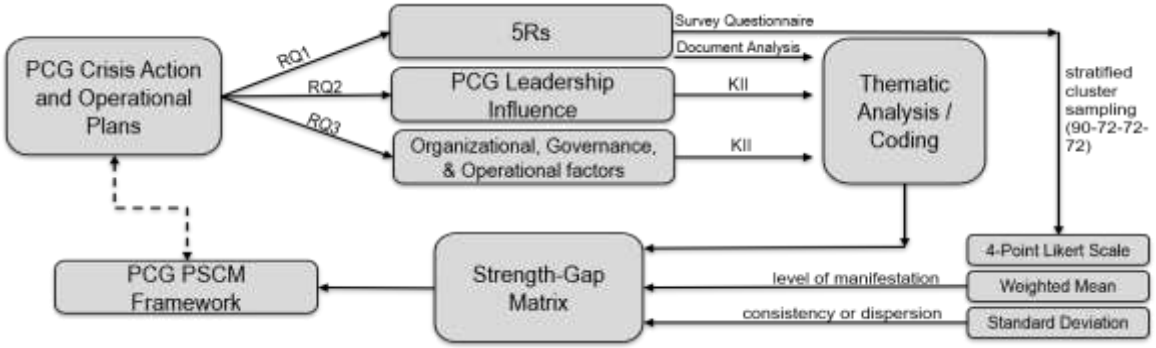


Figure 1.3 *Research Paradigm*

Statement of the Problem

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The study seeks to determine whether Philippine Coast Guard crisis planning embodies Public Service Continuity as an institutional capability and to use the resulting evidence as the basis for developing a Public Service Continuity Management Framework. Framing continuity as an institutional capability rather than a stand-alone document reflects how the field defines business continuity management – an approach aimed at ensuring the continued delivery of essential functions during crises, distinct from incident response (Cedergren & Hassel, 2025). The problem is also warranted by evidence that public-sector continuity capability is frequently of low maturity and that scholarship remains thin on how continuity requirements are actually operationalized in specialized institutions (Cedergren & Hassel, 2025).

Specifically, it seeks to answer the following questions:

1. What is the level of manifestation of Public Service Continuity in Philippine Coast Guard crisis planning in terms of: (a) Risk Assessment; (b) Resources; (c) Responsibilities; (d) Recovery; and (e) Restoration of Normalcy?
2. How do PCG leaders and key personnel describe the implementation of Public Service Continuity within existing crisis planning and actual operational practice?
3. What organizational, governance, and operational factors facilitate or hinder Public Service Continuity within the PCG?
4. Based on the integrated findings, what Public Service Continuity framework may be proposed for the Philippine Coast Guard?

LITERATURE REVIEW

Public Service Continuity: Concept and Evolution

In the continuity literature the distinction is made between the initial emergency response and the ongoing ability to deliver critical services in adverse circumstances. Emergency response is focused on life safety, incident stabilization and rapid mobilization. Continuity is concerned with the need to maintain critical operations, governance, data, assets and delivery of services during the phases of a disruption. Business Continuity Management has therefore been described as a strategy that guarantees the continuous delivery of critical operations in the event of emergencies that sets it apart from incident response (Cedergren & Hassel, 2025).

Public Service Continuity should be understood not as a stand-alone invention, but as the public-sector adaptation of a lineage of continuity thinking that originated elsewhere and was progressively refined. Business Continuity Management originated in the private sector, but has increasingly been applied within public sector organizations, where its largely equivalent counterpart is Continuity of Operations Planning (Cedergren & Hassel, 2025). In government, the strand dates to Continuity of Operations. This evolved from government-survivability planning and later broadened to include terrorism, natural hazards, cyber incidents, and infrastructure failure (Petersen, 2004). As the field matured, continuity has evolved from a static, plan-centric exercise into a recurring management discipline organized around the Plan-Do-Check-Act cycle (Sharp, 2012) and codified internationally in the ISO 22300 and ISO 22301 standards — ISO 22300 providing the shared vocabulary and defining continuity as the capability to keep delivering at acceptable predefined levels after a disruption (International Organization for Standardization, 2018a), and ISO 22301 specifying the auditable requirements for a business continuity management system built on that Plan-Do-Check-Act discipline (International Organization for Standardization, 2019); and more recently it has turned towards organizational resilience and adaptive capacity — a recognition that predictable risks are best met with an adaptive, efficient continuity capability while genuinely unpredictable events call for anticipated improvisation rather than reliance on fixed plans (Groenendaal & Helsloot, 2020). This adaptive turn is now central to public administration, where institutional resilience has become imperative for institutions facing piling, cascading disruptions (Bagali, 2026) and where dynamic-capability thinking has been extended beyond its original business formulation into public governance (Kristian et al., 2025).

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This progression interpreted for government purposes is what is called Public Service Continuity. It draws upon the focus of Business Continuity Management on critical operations, the succession mechanisms of Continuity of Operations, the delegation of responsibilities, alternative facilities and safeguarding of records, and the rigor of continuity management in testing and enhancement, but it reorients the focus from commercial productivity to the seamless execution of public responsibilities. The heritage of public sector organizations makes Public Service Continuity not just a cosmetic rebranding, but important and necessary. The study points out the lack of means for public sector organizations to bypass the inherent limitations of Business Continuity Management and asks for its improvement by adaptive approaches to complexity and unpredictability (Cedergren & Hassel, 2025). This translation is evident in the case of the Philippines where continuity planning for public service is presented as the mechanism through which government entities could provide continuous service after disasters. The bureaucracy may also be a victim of the calamity it is supposed to respond to (Florano, 2020). For a militarized and uniformed entity like the Philippine Coast Guard, which is often disrupted throughout different geographic areas that have a substantial impact on national security, a continuity strategy that merges the structural protections of Continuity of Operations with the adaptive, resilience-focused capabilities discussed in contemporary literature is just what is needed to be effective in real operational scenarios.

These strands converge in the ISO 22300 and ISO 22301 standards: ISO 22300 aligns the terminology of security and resilience – business continuity, continuity of operations, and organizational resilience all – and defines continuity as an organization's ability to continue to provide products or services at acceptable pre-determined levels after an incident of disruption (International Organization for Standardization, 2018a), whereas ISO 22301 specifies the requirements to establish, implement and improve a certifiable business continuity management system (International Organization for Standardization, 2019). Public Service Continuity shares the core logic of these standards – a defined capability, acceptable minimum service levels, and a managed cycle of assessment, testing and improvement – but differs from them in the object of continuity. While the ISO standards refer to that object as commercial products or services, the object of public institutions is not that commercial output, but that uninterrupted performance of public duties and state functions. Public Service Continuity therefore expands the standard to include the preservation of institutional authority, minimum service levels, legal accountability, public legitimacy and equitable access to essential services. This is why agencies develop continuity-of-operations plans to continue essential functions during emergency and disaster events (Whitworth, 2006).

Public Service Continuity is especially vital in agencies whose own breakdown can worsen a national crisis. When a large-scale disaster occurs, it disrupts the work of public institutions related to major national affairs, causing not only property damage but also a decline in national credibility and direct and indirect influences on the public (Jang et al., 2019). The loss of command, communications, logistics, mobility, information or personnel by a frontline institution has ramifications beyond the institution to citizens, communities, partner agencies and national governance. Therefore, continuity must be designed as a capability embedded in policy, leadership, planning, resources, exercises, and learning.

Continuity of Operations (Petersen; Whitworth)

The Continuity of Operations concept originated in government-survivability planning, but has since expanded to cover terrorism, natural hazards, cyber incidents, infrastructure failure, and other disruptions (Petersen, 2004). The current continuity guidance identifies nine principal elements: mission-essential functions, orders of succession, delegations of authority, continuity facilities, continuity communications, essential records, human capital, tests and exercises, devolution, and reconstitution (Whitworth, 2006).

These elements are meant to protect the government's operational capacity and legitimacy. Succession and delegation maintain lawful authority; alternative facilities and communications maintain

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command and coordination; essential-records protection maintains information; human-capital measures maintain personnel; and reconstitution provides a deliberate transition from continuity operations to stable institutional functioning (Whitworth, 2006).

The Continuity of Operations is essential for PCG because its command and service delivery is geographically dispersed and highly dependent upon communications, fuel, logistics, vessels, aircraft, information systems, stations, and inter-agency coordination. Any major disruption to any of these systems could slow search and rescue, maritime law enforcement, environmental response, maritime safety regulation, and humanitarian support. The purpose of Continuity of Operations planning is precisely to reduce the period of interruption of such critical operations (Jang et al., 2019).

Continuity Management (Sharp)

Continuity Management sees continuity as a periodic management process, not a one-off plan. It includes organizational context, risk and impact assessment, leadership commitment, strategy, resources, operational controls, performance evaluation, corrective action, and continual improvement (Sharp, 2012).

Continuity Management addresses a typical implementation issue: agencies might have formal plans that are not funded, exercised, reviewed, or integrated into normal decision making sufficiently. In particular in the public sector, implementation relies on leadership support, organizational commitment and training and the literature often points at low BCM maturity, although it also indicates steady progress (Cedergren & Hassel, 2025). Institutional capability exists only when leaders take ownership, allocate budget resources, define objectives, test assumptions, measure performance, and fix detected shortcomings.

This management logic is expressed in the Plan-Do-Check-Act cycle. Continuity arrangements are planned, implemented, tested, assessed and improved (Sharp, 2012). This cycle is crucial in public institutions as risks, personnel, facilities, technology, policies, and interdependencies evolve over time.

International Continuity Standards – ISO 22300 and ISO 22301 (International Organization for Standardization)

International standards for security and resilience, together with Continuity of Operations and Continuity Management, are the third theoretical foundation of Public Service Continuity, formalizing continuity into an auditable framework. The ISO 22300 series offer a useful framework for business continuity management, providing a common language and systematic basis for assurance of continuity in case of catastrophic disruption (Raković, 2024). ISO 22301 takes that vocabulary further by defining the requirements for a business continuity management system (International Organization for Standardization, 2019) and situating that system in the context of the organization's overall management system so that continuity is directly connected to organizational sustainability (Raevsky, 2023).

These standards are relevant to the public sector beyond just by definition. Business continuity management systems, especially ISO 22301, have been adopted by public sector organizations to safeguard the effectiveness of public service delivery in times of crises (Alghamdi, 2022). Thus, the ISO standards provide for Public Service Continuity what Continuity of Operations and Continuity Management do not provide by themselves: an internationally recognized, certifiable baseline against which an agency's continuity arrangements can be prescribed, measured, and enhanced. These same principles are operationalized in the Philippine 5Rs framework for the national public sector, so an assessment of PCG continuity against the 5Rs also measures the agency against the capability logic that these standards codify.

The national foundation for that framework is explicit. Government agencies are required to prepare Public Service Continuity Plans as prescribed in NDRRMC Memorandum Circular No. 33 Series of 2018 (National Disaster Risk Reduction and Management Council, 2018). The guidebook on continuity planning further categorizes the same into 5Rs such as Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy (National Disaster Risk Reduction and Management Council & Office of Civil Defense, 2022). The directive was cascaded down to the bureaucracy through Civil Service

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Commission Memorandum Circular No. 2, series of 2021, which directs the heads of constitutional bodies, departments, bureaus, agencies, local government units, government-owned or controlled corporations with original charters and state universities and colleges to prepare their Public Service Continuity Plan (Civil Service Commission, 2021).

The PSCP aims to ensure that the delivery of services to the public is not disrupted in case of any disruption (Luci-Atienza, 2021). It does this by focusing on internal capacities and recovery needs, adopting strategies that minimize the risk of damage and loss of critical processes, ensure leadership succession and improve the continuity capabilities of government entities (Luci-Atienza, 2021). The Philippine Coast Guard is an armed and uniformed service but is not a direct recipient of the Civil Service Commission's issuance. This does not preclude the development of a PSCP by the Philippine Coast Guard. Alternatively, voluntary alignment places the PCG under the same whole-of-government continuity standard operationalized by the 5Rs (Luci-Atienza, 2021). The 5Rs were chosen as the sole operational dimensions of this study because they could accommodate the operational and governance needs that would stem from the Continuity of Operations, Continuity Management and the ISO 22300/22301 standards, while being rooted in national policy.

The Level of Public Service Continuity: The 5Rs

The first research question asks what level of Public Service Continuity is reflected in Philippine Coast Guard crisis planning in terms of Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy. This group looks at the research on each of the 5Rs from a global to a local flow, figuring out both the global standard for each aspect and the Philippine evidence on how that aspect is actually used.

Risk Assessment

The Risk Assessment dimension is in line with ISO 31000, a globally recognized standard for risk management. ISO 31000 gives principles and guidelines for managing risk in a clear and organized way (International Organization for Standardization, 2018b). ISO 31000, which came out in 2009 and has since been widely adopted by the G20 and other economies, marked a shift from risk management that was based on compliance to risk management that was based on performance (Dali & Lajtha, 2012). An open, principle-based framework for finding, assessing, and reducing risks that improves service reliability and accountability is provided by ISO 31000. However, political turnover and a lack of resources often make it hard for public institutions to adopt this framework (Sembinova et al., 2021). Combining risk management and business continuity makes an organization more resilient (Zambrano-Ortiz, 2023) and they work well together. While ISO 22300 and ISO 22301 deal with the continuity capability itself, ISO 31000 deals with the earlier discipline of knowing the risks that continuity needs to deal with. This is why the 5Rs say that Risk Assessment should be the first step in planning for continuity.

Risk assessment, with a focus on continuity, is not simply about discovering risks. It analyzes at the effect of a disruption on critical functions, dependencies, personnel, facilities, data, technology, supply chains and partner companies. Business impact analysis, maximum tolerated interruption, recovery priorities and risk registers all help move from a general understanding of threats to continuity decisions. The business impact analysis identifies important functions, tolerable downtime, recovery time objectives, and recovery point objectives that are the basic components of the contingency plan (Onazi, 202). In real life, operational effect analysis, risk assessment and continuity strategies are made simultaneously (Jang et al., 2019).

Many high-risk institutions know about incidents but are bad at analyzing the impact on continuity. Dushie (2015) notes that there is a “disparity between threat (disaster) and plan and that preparedness is lagging behind awareness. There is also an implementation gap between strategic thinking and resilience action (Groenendaal & Helsloot, 2020). There is a gap between risk awareness and

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preparedness for recurrent disasters (Amao et al., 2007). An agency may know that earthquakes, typhoons, cyberattacks or armed threats are possible, but not know which services must continue, how long they can be interrupted or which dependencies will fail first. Assessment is only useful if it links risks to critical mission functions and acceptable levels of service. This is exactly what a business impact analysis is for, to identify the key functions and resources that are necessary to operate, and to know the other locations, communications and priority dependencies that are available (Păunescu et al., 2018).

Locally, this awareness to analysis gap is seen within the PCG itself. A study on the implementation of cybersecurity in the Service showed that its risk posture is compromised by unclear policies and circulars, limited budget and equipment, and inadequate specialized training and skilled personnel, even as leadership expressed strong commitment to prioritize the risk (Apillanes, 2024). Philippine disaster-management research more generally records the same pattern of high hazard awareness, alongside uneven translation into preparedness at the level of the responding institution (Florano, 2020). Thus, the benchmark for this dimension is not simply hazard identification, but a business-impact-analysis discipline that links each identified risk to the mission-essential functions it threatens, and to a defined acceptable service level.

Resources

Continuity resources include human resources, leadership skills, alternate work sites, transportation facilities, fuel supplies, equipment, communication systems, IT infrastructure, essential documentation, financial resources, suppliers, and mutually supportive assistance agreements. Resource adequacy should be evaluated on the basis of availability, redundancy, geographic dispersion, accessibility, and sustainability in the event of extended disruptions; effective continuity requires geographic dispersion to alternative sites, a cadre of essential personnel, access to critical data, and communication redundancy (Whitworth, 2006). Such government continuity planning that protects these assets has demonstrated an improvement in public-sector resilience with regard to robustness, redundancy, resourcefulness and speed (Haraguchi, 2020).

The geographically dispersed nature of the facilities of maritime actors, together with their dependence on fuel and maintenance, harsh weather, poor communication, and centralized specialized personnel, makes it difficult to keep the flow of their assets going. Continuity planning should identify any resource deficiencies and set up prioritized processes, reserves, contracts, and contingencies before an occurrence (Onazi, 2024,000). The PCG has strong evidence that an assessment of the IT and communication assets of Coast Guard ships involved in maritime search and rescue revealed obsolete or inadequate technology, inconsistent connectivity in isolated maritime areas, lack of standardized system protocols and inadequate training in the use of ICT. The assessment indicated that there is a need for better systems, standardization of operating procedures and technical training (Cacao, 2021). Therefore, the benchmark for the Resources dimension is based on redundancy and geographical distribution, as measured by a defined minimum service level, and not accumulation in peacetime.

Responsibilities

Continuity depends on clear authority and accountability. Orders of succession determine who assumes leadership when designated officials are unavailable, and delegations of authority specify which decisions may be made, under what conditions, and for how long – both being core components of continuity-of-operations planning (Whitworth, 2006; Petersen, 2004). Unit responsibilities must also address coordination, reporting, plan activation, resource release, public information, and recovery.

Military style chains of command provide a basis for leadership succession but administrative succession does not guarantee continuity of knowledge, systems and responsibilities. Often ignored is the transfer of knowledge between generations – from current staff to their successors – even though knowledge continuity is vital to the survival of organizations (Kalkan, 2006) and the loss of knowledge when

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experienced personnel transfer, resign, or retire is one of the most pervasive and costly gaps organizations face (Beazley et al., 2007). The risk is acute in uniformed institutions because much of the expertise in leadership is tacit – based on experience rather than formal training and doctrine (Horvath et al., 1998).

This is not hypothetical in the PCG. An evaluation of the Service's training program identified that "limited funding, inadequate facilities and insufficient training duration" constrain its human-resource-development agenda and called for experiential learning and standardized policies for the institutionalization of the transfer of competence in crisis-management adaptability and emergency-response protocols (Tomi, 2025). Continuity-oriented responsibility therefore implies conscious knowledge transfer, role-specific checklists that standardize performance and enhance reliability (Beaumont & Russell, 2012), alternate teams and tested decision authorities – the benchmark being that authority and know-how survive the exit of any individual.

Recovery

Restoration is a lot more than just going back to work. The primary focus is on the critical services restoration task. Recovery is achieved through the basic elements of priorities, service standards, recovery time objectives, contingency strategies, restoration sequences, responsible departments and practical exercises. The recovery time objective and the recovery point aim are designed for each function to ensure that the most critical operations have the least lag. The rehabilitation strategy is founded on these objectives (Onazi, 2024).

Recovery protocols need to differentiate between continuity and reconstitution. During the repair of the facilities, communications, systems, records and supply chains, key operations may have to be performed at diminished capabilities. Recovery time and recovery point objectives, which are recovery targets, enable the possibility of careful planning to reduce losses during this time (Zgureanu, 2022). Restoration without recovery priorities is reactive, guided by personal judgment and improvisation. This is widely documented as an aftermath of overdependence on centralized power and lack of structured approaches in crisis management (Webb & Chevreau, 2006).

The Philippine experience highlights this at the governance level: after the Indian Ocean Tsunami and Super Typhoon Haiyan, existing disaster-management institutions were found unprepared to govern large-scale recovery, leading to the establishment of ad-hoc recovery agencies whose effectiveness was tied to the power to command agencies, the capacity to streamline bureaucratic processes, and accountability for recovery results (Potutan et al., 2021). The benchmark for Recovery is therefore a set of predefined, owned and exercised recovery priorities and service levels rather than the improvisation of new arrangements after the disaster.

Restoration of Normalcy

Restoration of Normalcy is the intentional act of moving from continuity operations to stable operations within an organization. Damage assessment Validation of restored systems Demobilization or relocation decisions Personnel support Records reconciliation Normalization of command and administrative processes. Restoration also means institutional learning. The lessons-learned approach to after-action reporting is based on the premise that systematic learning from real incidents improves practice and reduces avoidable harm. It is supported by the use of after-action reviews, corrective-action plans, assigned accountabilities, deadlines, and plan revisions to prevent the recurrence of the identified weaknesses (Savoia et al., 2012).

View continuity not as a single text, but as a framework that is maintained and constantly developed which results in the sustainability of learning (Sharp, 2012). Unless the insights gained are turned into policy, doctrine, training, financial allocations and modified continuity frameworks, the same implementation elements that drive the advancement of continuity maturity over time (Cedergren & Hassel, 2025), they have little worth. As the records of the Philippines indicate, such education can be formalized. After Typhoon Haiyan, disaster-risk-reduction agencies expanded their roles from mere post-disaster

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assistance to active disaster-risk management, which was later reviewed to propose a formal resilience framework (Badoc-Gonzales et al., 2021). The benchmark of this dimension is a closed learning loop in which learning after action becomes updated strategies, financial plans and training programs rather than archived reports.

This is the operational benchmark for Research Question 1: the Public Service Continuity is high when risks are tied to critical functions, resources are duplicated and dispersed, responsibilities are maintained despite staff turnover, recovery priorities are pre-set, and lessons learned are institutionalized. The operational benchmark is the five dimensions read together.

Leadership Influence in the Implementation of Public Service Continuity

The second research question concerns how the implementation of Public Service Continuity is expressed by PCG leaders and key staff in the present system of crisis management and operational realities. The global literature has consistently acknowledged leadership as a critical factor in the execution process. The commitment of the organization and the leadership are key to the implementation of continuity management in public sector organizations (Cedergren & Hassel, 2025). Senior executives decide if continuity is an operational requirement, a regulatory requirement or a standard governance duty. A meta-analysis in public administration shows that leadership styles have a significant and positive association with crisis-management outcomes such as learning, sense-making, and significance (Aung & Zhang, 2026). Today's governance is increasingly dependent on crisis management, with leaders held responsible for mitigating consequences and advancing collective learning (Boin et al., 2016). There are two different executive duties which make up strategic crisis leadership within the public sector. First, the articulation of the rationale behind such choices, and then, the process of decision-making in the face of ambiguity (Ansell & Bartenberger, 2019).

Implementation is also a function of the organization's culture. Institutions with mission-oriented cultures can provide fertile ground for strong improvisation and resilience in the face of incidents, but over-reliance on individual competence can camouflage structural deficiencies. High-reliability organizations offer a template here, as they have developed ways of acting and learning that allow them to better deal with the unexpected than other organizations (Weick & Sutcliffe, 2007). Sustainable continuity moves capability from being based on individual experience, to documented, resourced, exercised and transferable systems.

The Philippine evidence confirms and qualifies this world picture. The national government operationalized continuity of governance in the COVID-19 pandemic and concurrent disasters through a "task force" model – a military concept of a unit designed for a single activity – reconfiguring leadership, structure, human capital, and policies to sustain services under crisis (Perez, 2025). The most effective local government units were not necessarily those with advantaged resources but those with decisive leadership and flexible local measures (Talabis et al., 2021).

However, they are underfunded and lack a defined plan. The PCG is committed to leadership. Staff noted that substantial attempts were taken to improve cybersecurity governance; however, instructions were ambiguous, and there was a lack of funds (Apillanes, 2024). That means that there is some rationale for leadership, albeit not necessarily embedded in the current sustainability practices. The organization is led over the long term, with top executives steering strategy, resources and execution. They ensure people are held accountable and that new ideas are put into better ways of doing things. As a result, the roles of high-reliability organizations (accountability and education) and strategic crisis leadership (decision-making and sense-making) are combined.

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Organizational, Governance, and Operational Factors that Facilitate or Hinder Public Service Continuity

The third study question asks about the organizational, governance, and operational limits that either enhance or impede Public Service Continuity within the PCG. Bagali (2026) highlights three core characteristics of organizational resilience – absorptive, adaptive, and transformative capacities that are crucial for public organizations to survive and recover from global disruptions. Rigidity within the hierarchy, to the extent that it is excessive, invariably impedes adaptation. Public disaster organizations rely on inter-agency collaboration and continuous training to recognize early warning signals, develop strategies, and quickly adjust procedures, hence improving their response effectiveness (Kristian et al., 2025). Studies of very reliable organizations also encourage situational awareness, decentralized decision-making, redundancy, and continuous learning (Weick & Sutcliffe, 2007). The continuing ineffectiveness of inflexible command and control techniques in disastrous situations calls for an approach that combines hierarchical oversight with the flexibility required for rapidly changing crises, based on mutual understanding, conversation and collaboration (Comfort, 2007). Similarly, inter-agency collaboration, inter-divisional collaboration.

A distinctive operational aspect is the territorial jurisdiction of a maritime agency. Maritime search and rescue (SAR) operations are crucial for the safety of lives at sea and are governed by maritime regulatory authorities. They carry out humanitarian, regulatory, environmental, law enforcement and national security functions (Cucinelli et al., 2023). The main weaknesses in governance are lack of organizational capacity and the fragmentation of roles. The island-centric arrangement exacerbates continuity difficulties due to remoteness, distant command centers, fragmented infrastructure, dependence on travel, communication lags, and uneven resource distribution (Cucinelli et al., 2023). It's difficult to oversee events across large maritime areas.

The command and control literature has coalesced around a trade-off between central authority and local autonomy. Fully centralized architectures perform well under favorable conditions only, and degrade sharply as conditions worsen. Decentralizing decisions that can be handled with local information – while centralizing only consequential functions such as resource allocation – yields the most robust performance across environments (Boss & Gralla, 2022).

This logic is formalized in the idea of mission command, which is considered preferable to centralized control in communications-denied circumstances exactly because it assigns authority and depends on subordinate commanders to grab the initiative within the commander's intent (Ahrens, 2017; Picco, 2015). Indeed, this is the balance that is institutionalized in coast guard doctrine The U.S. Coast Guard's capstone doctrine states that the Commandant retains overall operational command while command and control is normally delegated to operational commanders in the field (U.S. Coast Guard, 2014). Because many operations are emergent and communications are frequently limited, the Service deliberately pushes authority and responsibility to the lowest possible level so that personnel on-scene can act without waiting for direction from higher levels (U.S. Coast Guard, 2014) – reconciling unity of effort with decentralization through the commander's intent (U.S. Coast Guard, 2014).

Disaster-response research reaches the same conclusion: intentionally combining centralized systems, which provide consistency, resources, and large-scale logistics, with distributed ones, which provide adaptivity and responsiveness to local needs, produces a more complete response than either mode alone (Brugh et al., 2015) – an arrangement often described as polycentric governance, in which decision-making power is dispersed across autonomous units operating under a shared rule of law (Coyne & Lemke, 2011). Maritime search-and-rescue doctrine embeds this structure through search-and-rescue regions, each associated with a Rescue Coordination Centre and optionally divided into sub-regions with rescue sub-centers (International Maritime Organization & International Civil Aviation Organization, 2022), while expressly not restricting anyone from assisting persons in distress (International Maritime Organization & International Civil Aviation Organization, 2022) – the same principle documented in practice, where a

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single affected unit routinely depends on reinforcement and coordinated assistance from beyond its own resources (Šoškić et al., 2014; Button & Gorgol, 2019).

The Philippines' maritime nature intensifies these problems. The use of adaptive and flexible governance systems has been found to greatly improve institutional agility and emergency response in distant island territories (Shafira & Rasaili, 2026). On the other hand, the gap between centralized national policies and real needs at the regional level implies great institutional fragmentation and lack of coordination (Rani et al., 2026). The strongest evidence of this in the Philippines is shown in the regulatory framework and bureaucratic processes of disaster management.

The scenario becomes more complex with the effect of the disaster on the bureaucracy, which has characteristics that can either support or hinder emergency and crisis activities (Florano, 2020). The Philippine government institutions have long been considered as dependent on bureaucratic capacity to function well. A review of the pandemic response using the resilience-governance framework showed continuing deficiencies in information handling, flexibility, credibility and stakeholder interconnectedness (Felices, 2021).

The district-level evaluation within the PCG perceives capability as being distributed across geographic space and exercised locally, with individuals positioned to deploy and coordinate response according to local operational priorities (Añasco, 2024). This balance is enshrined in the PCG's enabling law itself. Republic Act No. 9993 establishes the Service's national head as a single Commandant – himself a former District Commander – (Republic Act No. 9993, 2009) and establishes District Commanders as one of the Service's key command positions (Republic Act No. 9993, 2009), and explicitly authorizes the PCG to call upon the services of other government agencies and the merchant marine fleet in rendering aid and conducting search and rescue (Republic Act No. 9993, 2009).

The model that emerges from this cluster is a facilitators-and-barriers continuity benchmark for an archipelagic uniformed service: continuity is facilitated by absorptive, adaptive, and transformative organizational capacity, leadership ownership, inter-agency coordination, and a centralized-decentralized command balance that preserves national command while enabling on-scene initiative; it is hindered by hierarchical rigidity, resource and knowledge gaps, national–local misalignment, and the bureaucracy's own vulnerability when it is itself the disaster victim.

Toward a Public Service Continuity Framework Benchmark to Address the Gap

The fourth research inquiry tries to identify what Public Service Continuity framework could be proposed for the Philippine Coast Guard based on the synthesis results. In response to this a standard is needed, based on the literature of both international and domestic framework. ISO standards offer a verifiable global standard for continuity (International Organization for Standardization, 2019; Alghamdi, 2022), and recent scholarship has proposed holistic public-administration frameworks that combine reform, responsiveness, and resilience—the "3R" model—to close the persistent gap between policy hope and operational reality in resource-constrained governments (Barbier, 2026). Likewise, studies have pointed to the importance of building genuinely resilient public institutions rather than strictly meritocratic ones for the efficient provision of services in developing countries (Zaato & Ohemeng, 2015). Research on service continuity in times of crises has demonstrated that integrated strategies for institutional resilience offer governments concrete mechanisms to guarantee the continuity of essential services during and after a disruption (Hamed, 2025).

From the Philippine point of view, the regional theoretical literature arrives at the same conclusion. The article explicitly defines public service continuity planning as the measure that allows government agencies to continue providing services in times of disasters, using real-life cases of agencies ready for Super Typhoon Haiyan (Florano, 2020). The continuity plans of government operations are presented as supporting, rather than redundant, to regional disaster plans. Regional disaster plans tend to focus on the government's responsibilities to the citizens, but do not specify how the government would

continue to operate. Continuity plans have been shown to increase resilience as well as robustness, redundancy, resourcefulness and speed (Haraguchi, 2020).

Philippine disaster-governance studies likewise recommend formal resilience frameworks as the corrective to ad-hoc, post-disaster institution-building (Badoc-Gonzales et al., 2021; Potutan et al., 2021). The national 5Rs framework already provides the policy-based operational structure into which such a benchmark can be poured (National Disaster Risk Reduction and Management Council, 2018; Civil Service Commission, 2021).

Taken together, the foreign and local literature points to the same framework requirement: a Philippine Coast Guard Public Service Continuity framework that operationalizes the internationally benchmarked continuity capability (ISO-aligned, resilience-oriented) through the nationally mandated 5Rs, tailored to an archipelagic uniformed service. This is the benchmark the proposed framework must reckon with, and it is the design target toward which the integrated findings of this study are directed.

Synthesis of Literature and Research Gap

The literature studied is structured around the four research questions. It tells a coherent story. The difference between Public Service Continuity and emergency response is that public service continuity is about protecting critical operations and governance during a crisis. Today it means a globally recognized and verified organizational competency embedded in the whole management framework (ISO 22300 and ISO 22301 standards) (Cedergren & Hassel, 2025; Whitworth, 2006; Sharp, 2012; Raković, 2024; Raevsky, 2023). Secondly, this ability is embodied in the Philippine 5Rs framework which acts as the national policy and the standard for the study of this research (National Disaster Risk Reduction and Management Council, 2018). Second, leadership is the key to execution, a combination of responsibility and diligence with decision-making and meaning-making (Aung & Zhang, 2026; Ansell & Bartenberger, 2019). An archipelagic uniformed service is enhanced by organizational resilience and a structured command hierarchy. It, however, is challenged by rigidity, resource and competence constraints, and the inherent frailty of bureaucratic structures (Bagali, 2026; Florano, 2020).

The literature also points to an institutional gap. The PCG has crisis and operating plans but the existence of these documents has not been thoroughly examined against the whole 5Rs framework. There is scant empirical data whether risks are associated with key duties, resources are redundant and sustainable, responsibilities and succession are continuity-oriented, recovery priorities are pre-designated, and lessons learned are turned into institutional improvements. This reflects the wider fact that continuity scholarship in the public sector is still limited, of low maturity, and scant on how continuity criteria are operationalized in specialized institutions (Cedergren & Hassel, 2025).

Philippine research, by contrast, is limited to community preparedness, incident response, and inter-agency coordination post-major typhoons (Ferrer, 2026; Blanco, 2015), and even where public sector organizations have adopted ISO 22301-based systems (Alghamdi, 2022), adoption is partial. PCG continuity has not been evaluated against the international ISO capability benchmark nor the complete 5Rs framework. It is nevertheless necessary to distinguish the ability to respond to an external emergency from the ability to keep the agency's own key functions going when it is directly affected.

This study aims to solve this gap by measuring the level of Public Service Continuity using the 5Rs, describing how continuity is implemented and led, identifying organizational enablers and barriers, and incorporating the findings into a suggested PCG Public Service Continuity framework. Integration is done using joint displays that connect the quantitative and qualitative strands (Fetters & Tajima, 2022), with the qualitative strand analyzed using theme analysis to find patterns of meaning within the interview data (Clarke & Braun, 2017). Hence, the literature is closely connected to the four research topics and is the foundation for the survey, interview guide, document analysis matrix, joint display, and framework building process.

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METHODS

Research Design

The study employed an explanatory sequential mixed-methods research design, in which quantitative data collection and analysis preceded qualitative inquiry (Ivankova et al., 2006; Creswell & Plano Clark, 2018). This design was appropriate because the study first required a measurable baseline of PSC manifestation and then an explanation of the organizational, governance, and operational conditions behind the observed results.

The quantitative strand was descriptive. A 33-item questionnaire measured the reported manifestation of the 5Rs. Frequency and percentage distributions described response patterns; weighted means described indicator-level, dimension-level, and overall manifestation; and standard deviations described the dispersion of respondent assessments. Item tables were presented in descending order of weighted mean to show the pattern of manifestation.

The qualitative strand was explanatory. Fifteen KIIs were conducted after quantitative analysis and were analyzed using Narrative Analysis. Open coding identified recurring experiences, practices, decisions, constraints, and explanations; narrative coding then connected these accounts through context, sequence, actors, conditions, actions, and outcomes (Riessman, 2008; Saldaña, 2021). Documentary analysis supplied an institutional source of evidence by examining selected LOIs, OPLANs, IMPLANs, and related planning materials against the 5R continuity requirements (Bowen, 2009).

The study was descriptive, explanatory, and developmental. It did not test causal relationships. Its purpose was to establish a PSC baseline, explain the identified strengths and gaps, and translate the integrated evidence into requirements for a proposed continuity-management plan.

Continuity Management Theory served as the study's primary management and interpretive lens. It explains how continuity is institutionalized through iterative risk and impact assessment, strategy, resource planning, leadership accountability, exercises, performance evaluation, corrective action, and continual improvement (Sharp, 2012). Continuity of Operations supplied complementary operational requirements, including essential functions, succession, delegations of authority, alternate facilities, continuity communications, vital records, human-capital readiness, and reconstitution (Petersen, 2004; Whitworth, 2006). ISO 22300 and ISO 22301 provided the complementary normative vocabulary and capability benchmark.

The Philippine public-service continuity 5Rs – Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy – served as the study's operational measurement and integration framework. Organizational resilience and adaptive capacity were treated as complementary concepts that explain personnel and unit adaptation under disruption, rather than as additional co-equal theories.

Participants and Sampling Techniques

The quantitative phase involved 306 PCG personnel performing command, staff, supervisory, technical, and operational functions relevant to crisis planning and continuity. Respondents were drawn from the National Headquarters (NHQ), Coast Guard District National Capital Region–Central Luzon (CGD NCR-CL), Coast Guard District Central Visayas (CGD CV), and Coast Guard District Southwestern Mindanao (CGD SWM).

Respondent Profile

In addition to the 33 PSC indicators, the survey collected five non-identifying profile variables to describe the composition and relevant operational experience of the respondents. These variables were included to establish the breadth of organizational representation in the quantitative sample and to provide descriptive context for interpreting the PSC assessments. They were not treated as independent variables for causal testing.

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Table 1. *Non-identifying profile variables*

Profile Variable	Response Categories	Purpose in the Study
Assigned unit / command cluster	National Headquarters; CGD National Capital Region; CGD Central Visayas; CGD Southwestern Mindanao	Describes organizational/site representation.
Functional area	Maritime Safety; Maritime Security & Law Enforcement; Marine Environmental Protection; Fleet; Aviation; Education/Training/Doctrine; Administration/Support	Describes functional diversity represented in the survey.
Category of position	Command/senior officer; Junior officer; Senior non-officer; Non-officer	Describes the distribution of respondents by broad level/category of position.
Length of service	Under 5 years; 5–10 years; 11–20 years; Over 20 years	Provides a descriptive indicator of institutional and operational experience.
Direct involvement in crisis/continuity planning	Yes; No	Distinguishes respondents with direct planning involvement from those assessing continuity from related operational, technical, supervisory, or support roles.

The respondent profile was summarized using frequency and percentage distributions. The profile variables were used descriptively to show the composition of the survey sample and to support contextual interpretation of the quantitative findings. Where subgroup comparisons were discussed, these were treated as descriptive patterns rather than tests of causal relationships.

The sample size was determined from a target population of 1,303 using the finite-population formula associated with Yamane (1967), commonly expressed as $n = N/[1 + Ne^2]$. At a 5 percent margin of error, the computed sample was 305.9, rounded to 306 respondents (Taherdoost, 2017; Adam, 2020).

$$n = 1{,}303 / [1 + 1{,}303(0.05^2)] = 305.9 \approx 306 \text{ respondents}$$

Proportionate stratified sampling was used to ensure representation from each organizational site. Each stratum contributed respondents according to its share of the defined population, thereby maintaining approximately the same sampling fraction across sites (Diaz-Quijano, 2018).

For the qualitative phase, 15 key informants were selected through maximum-variation purposive sampling. They were drawn from NHQ-level leadership and key functional positions in the Maritime Safety Services Command, Maritime Security and Law Enforcement Command, Marine Environmental Protection Command, Coast Guard Fleet, Coast Guard Aviation Command, and Coast Guard Education, Training and Doctrine Command. Selection emphasized direct experience in command, operations, planning, logistics, administration, training, crisis management, command and control, and organizational recovery (Nyimbili & Nyimbili, 2024).

Table 2. *Locale, Participants, and Documentary Corpus*

Evidence Source	Unit of Analysis	Sequence and Final Analytic Use
Survey Questionnaire	306 PCG personnel; 33 survey items	Phase 1 – Quantitative: established the level and pattern of 5R manifestation using frequency/percentage, weighted mean, standard deviation, and rank.

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Key Informant Interviews	15 anonymized KII narratives from selected NHQ-level leaders and key functional personnel	Phase 2 – Qualitative: explained how and why quantitative patterns occurred through Narrative Analysis.
Documentary Corpus	15 substantive LOIs, OPLANs, IMPLANs, and related planning packages	Supporting institutional evidence: determined whether continuity requirements were formally reflected in existing PCG plans.
Integrated Evidence	Quantitative results, KII narratives, and documentary findings	Integration: produced 5R meta-inferences, a Strength–Gap Matrix, and requirements for the proposed PCG PSCP.

Sampling Allocation

The total sample of 306 was distributed through proportional allocation using $n_h = n(N_h/N)$, where n_h is the sample allocated to a stratum, n is the total sample, N_h is the stratum population, and N is the total population. Proportional allocation preserves the relative contribution of each stratum to the total sample and supports representation across organizational groups (Diaz-Quijano, 2018). The overall sampling fraction was approximately 23.5 percent.

Table 3. *Proportional Allocation of the Survey Sample Across Strata*

Stratum/Site	Population (N_h)	Weight ($W_h=N_h/N$)	Sampling Fraction	Allocated Sample (n_h)
National Headquarters	383	0.294	23.5%	90
Coast Guard District NCR-CL	307	0.236	23.5%	72
Coast Guard District Central Visayas	306	0.235	23.5%	72
Coast Guard District Southwestern Mindanao	307	0.236	23.5%	72
Total	**1,303**	**1.000**	**23.5%**	**306**

Inclusion Criteria

Specific inclusion criteria were established to ensure that the informants and documentary sources included in the study could provide relevant and informed evidence on crisis planning and Public Service Continuity within the PCG. These criteria were applied separately to the three sources of evidence used in the study: survey participants, key informants, and documentary sources. The corresponding requirements for each are presented in the succeeding subsections.

Survey Participants

Survey participants were commissioned officers and non-officer personnel assigned to NHQ and the three selected Coast Guard Districts. Eligible personnel occupied command, staff, supervisory, technical, or operational positions involving crisis planning, operations, logistics, communications, personnel, administration, information management, or organizational recovery. Respondents were required to have sufficient institutional or operational experience to assess existing PCG practices. Strategic-office respondents had at least five years of PCG service, while Central Staff and district respondents met the experience requirements established for their respective functional groups.

Key Informants

Key informants were selected from NHQ-level leadership and key functional positions in the identified functional, operational, support, and training commands. They occupied command, executive, staff, planning, logistics, doctrine, operations, training, or administrative positions that provided direct knowledge of crisis planning, emergency operations, organizational recovery, and continuity-related

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practices.

Documentary Sources

The documentary corpus consisted of officially available PCG planning materials relevant to crisis management, emergency response, disaster operations, and organizational continuity, principally LOIs, OPLANs, and IMPLANs from NHQ and the selected Coast Guard Districts. Documents were included when they were relevant to the study objectives and available through authorized organizational channels during the research period. Document analysis was used as a systematic qualitative procedure for examining documentary content and its relevance to the research questions (Bowen, 2009).

Research Instruments

The quantitative instrument was a 33-item questionnaire organized according to the five PSC dimensions. Risk Assessment contained seven indicators; Resources, seven; Responsibilities, seven; Recovery, six; and Restoration of Normalcy, six. The indicators covered continuity-impact assessment, personnel and resource depth, alternate facilities and communications, records and logistics, succession and delegation, recovery priorities and minimum service levels, reconstitution, corrective action, and organizational learning.

A four-point Likert scale was used to rate the manifestation of each indicator. The study summarized aggregated multi-item results descriptively through weighted means and standard deviations, with due caution regarding the assumptions associated with Likert-type data (Sullivan & Artino, 2013). The resulting quantitative findings provided the baseline for the explanatory qualitative phase.

All weighted means in this chapter are interpreted using the norm-based bell-curve range. The four-point continuum uses 0.50-point tails for the extreme categories and 1.00-point middle bands for the two central categories. Thus, 3.50–4.00 is Highly Manifested, 2.50–3.49 is Manifested, 1.50–2.49 is Slightly Manifested, and 1.00–1.49 is Not Manifested. This is an interpretive convention for aggregated weighted means and does not assert that the observed Likert responses themselves follow a normal distribution.

Table 4. *Norm-Based Bell-Curve Interpretation of the Four-Point PSC Scale (study interpretive convention; Mollel & Rwabishugi, 2021)*

Scale Anchor	Norm-Based Weighted Mean Range	Band Width	Verbal Interpretation	Operational Interpretation
4	3.50–4.00	0.50 tail	Highly Manifested	PSC practice or requirement is strongly evident and substantially incorporated into existing PCG arrangements.
3	2.50–3.49	1.00 middle band	Manifested	PSC practice or requirement is generally evident but may still require strengthening or further institutionalization.
2	1.50–2.49	1.00 middle band	Slightly Manifested	PSC practice or requirement is evident only to a limited or inconsistent extent and requires improvement.
1	1.00–1.49	0.50 tail	Not Manifested	PSC practice or requirement is largely absent or not sufficiently evident in existing arrangements.

The semi-structured KII guide principally addressed RQ2 and RQ3. It examined how PSC was implemented in crisis planning and daily operations and what organizational, governance, and operational variables facilitated or hindered continuity. Parallel questions on the 5Rs were included to connect the interview evidence directly with the quantitative findings.

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The Document Analysis Matrix was likewise structured around the 5Rs. It examined explicit evidence of continuity governance, mission-essential functions, continuity-impact assessment, minimum service levels, alternate facilities, vital records, specialized succession, recovery objectives, reconstitution, testing, after-action review, corrective action, and periodic plan revision.

Data Gathering Procedure

Data gathering followed the sequence of the explanatory sequential design. The survey instrument was finalized after content validation and pilot testing. It was then administered to the 306 respondents from NHQ and the three selected districts using a common questionnaire, response scale, and set of instructions. Completed responses were retrieved, encoded, cleaned, and analyzed before the qualitative phase.

Content validation examined the relevance, clarity, appropriateness, and alignment of the 33 survey items with the 5Rs. The revised questionnaire was pilot-tested with 20 PCG personnel who had characteristics comparable to the intended respondents but were not part of the final sample. Pilot feedback was used to refine unclear, repetitive, or technically inappropriate items.

The internal consistency of the final 33-item instrument was examined using Cronbach's alpha (α). Dimension-level coefficients were also examined where appropriate. Cronbach's alpha was treated as evidence of internal consistency and not as proof of content or construct validity (Tavakol & Dennick, 2011).

Table 5. *Internal Consistency of the PSC Instrument*

Scale	Number of items	Cronbach's alpha
Risk Assessment	7	0.936
Resources	7	0.941
Responsibilities	7	0.971
Recovery	6	0.968
Restoration of Normalcy	6	0.957
Overall PSC instrument	33	0.986

The coefficients were calculated from the 306 verified responses. They demonstrate high internal consistency for the aggregated PSC measures, while not replacing content validation or other forms of validity assessment.

Data Analysis

Analysis followed the explanatory sequential logic of the research design: quantitative data were analyzed first to establish the level and pattern of PSC manifestation; KII narratives were then analyzed to explain the measured patterns; and documentary evidence was examined to determine the formal reflection of continuity requirements in existing PCG plans (Ivankova et al., 2006; Creswell & Plano Clark, 2018). The three evidence sources were subsequently integrated through the 5Rs Joint Display and meta-inference process (Fetters & Tajima, 2022).

Quantitative Data Analysis

The verified responses were checked for completeness, valid coding, missing entries, duplicate records, and consistency with the four-point response scale. Frequency and percentage distributions described response patterns. Weighted means were computed for each indicator, each 5R dimension, and the overall PSC scale. Standard deviations described the dispersion of assessments around the relevant aggregated mean. All means and standard deviations were rounded to two decimal places.

The four bands were used as the study's decision rule for computed weighted means; they did not assert that individual Likert responses followed a normal distribution. The survey response anchors remained 4 = Highly Manifested, 3 = Manifested, 2 = Slightly Manifested, and 1 = Not Manifested. Item-

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level tables were sorted from the highest to lowest mean to display the pattern of manifestation, without a rank column.

Table 6. *Interpretation of Aggregated Weighted Means*

Weighted-mean range	Interpretation	Interpretive use
3.50–4.00	Highly Manifested	Practice is strongly evident and substantially incorporated.
2.50–3.49	Manifested	Practice is generally evident but may require further strengthening.
1.50–2.49	Slightly Manifested	Practice is limited, inconsistent, or incompletely institutionalized.
1.00–1.49	Not Manifested	Practice is largely absent or not sufficiently evident.

Qualitative Data Analysis

The 15 KII narratives were analyzed using Narrative Analysis (Riessman, 2008). Open coding first identified significant statements, recurring experiences, practices, decisions, constraints, and explanations. Related open codes were then connected through narrative coding to preserve organizational context, sequence, actors, decisions, conditions, actions, and outcomes (Saldaña, 2021).

The qualitative analysis principally addressed RQ2 and RQ3 while also examining parallel evidence on the 5Rs. KII evidence was classified during integration as corroborative when it supported the survey pattern, complementary when it added explanation or context, qualifying when it revealed limits or conditions, and contradictory/divergent when it materially differed from the quantitative pattern.

Documentary Data Analysis

The documentary corpus was analyzed systematically using the 5R-based Document Analysis Matrix (Bowen, 2009). Each indicator was classified as Present, Partial, or Not Evidenced. Present indicated that the document explicitly established the relevant continuity requirement; Partial indicated that a related concern was addressed but the continuity requirement was incomplete; and Not Evidenced indicated that the reviewed text did not demonstrate the requirement.

Documentary findings were compared with the corresponding survey and KII evidence. Their relationship was likewise assessed as corroborative, complementary, qualifying, or contradictory/divergent. This allowed the documents to function as an independent institutional source rather than as automatic confirmation of participant perceptions.

Mixed-Methods Integration and Meta-Inference

The final analytical stage integrated the quantitative results, KII narratives, and documentary findings. A 5Rs Joint Display placed the three forms of evidence side by side for each PSC dimension and recorded their relationship, integrated interpretation, and implication for PSC development. Joint displays support systematic mixed-methods integration and the development of meta-inferences from combined evidence (Fetters & Tajima, 2022).

Meta-inferences were conclusions derived from the combined interpretation of the three evidence sources. These were consolidated into a Strength–Gap Matrix identifying existing strengths, institutional and operational gaps, supporting or divergent evidence, and corresponding continuity requirements. The Strength–Gap Matrix then served as the empirical basis for the proposed PCG PSCP.

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Table 7. *Explanatory Sequential Research Analysis Workflow*

Stage	Analytic purpose	Output
1. Quantitative analysis	Establish the item-level, dimension-level, and overall 5R manifestation pattern.	Survey profile: frequency, weighted mean, SD.
2. Explanatory KII analysis	Explain how and why the quantitative pattern occurred; identify implementation experience and factors.	Narrative accounts and coded explanations.
3. Documentary analysis	Assess whether continuity requirements were formally reflected in selected plans.	5R document ratings with traceable evidence locations.
4. Joint display and meta-inference	Compare and integrate survey, KII, and documentary evidence.	Corroboration, complementarity, qualification, or divergence.
5. Strength–Gap Matrix	Translate integrated findings into continuity-management requirements.	Prioritized strengths, gaps, and requirements.
6. Developmental output	Design the evidence-informed proposed plan.	PSC Architecture, A3R2 Framework, and illustrative OPLAN "KATATAGAN".

Ethical Considerations

All ethical safeguards applicable to the study were consolidated under this section. The research observed the university's ethical requirements, applicable Philippine Coast Guard research approval processes, and the requirements of Republic Act No. 10173, or the Data Privacy Act of 2012 (Republic Act No. 10173, 2012).

Participation was voluntary. Prospective survey respondents and key informants were informed of the purpose and procedures of the study, foreseeable risks and benefits, confidentiality protections, and their right to decline or withdraw without penalty. Organizational or command authorization did not substitute for individual informed consent. Consent for audio recording was obtained before recording any KII.

Confidentiality and organizational security were protected throughout the study. Survey findings were reported in aggregate form, and interview informants were identified through codes rather than names or specific personal identifiers. Classified information, intelligence reports, sensitive tactical procedures, restricted security details, and specific operational vulnerabilities were outside the scope of data collection and reporting. Only officially available and releasable documents obtained through authorized channels were included in the documentary corpus.

Research records were handled in accordance with data-protection requirements. Electronic files were maintained in password-protected storage, while physical records were secured with access limited to the researcher and authorized academic advisers. Interview transcripts were reviewed for accuracy and anonymized before analysis.

Trustworthiness of the qualitative and integrated findings was supported through credibility, dependability, confirmability, and transferability procedures (Akbar, 2026). These included standardized data collection, accurate transcription, an analytical audit trail, comparison across survey, KII, and documentary evidence, clarification of ambiguous interview statements when necessary, and peer or academic-adviser review of the analytical process (Lane & Bourdo, 2026). Instrument content validation, pilot testing, and Cronbach's alpha supported the quality of the quantitative instrument and were treated separately from qualitative trustworthiness.

The findings were presented for institutional learning, organizational resilience, and capability improvement. Reporting focused on patterns, systems, and continuity requirements rather than assigning fault to individual participants or organizational units.

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RESULTS AND DISCUSSION

This chapter presents the findings according to the four research questions and follows the Presentation–Discussion–Interpretation–Analysis (PDIA) format. Consistent with the explanatory sequential mixed-methods design, the quantitative results establish the level and pattern of Public Service Continuity (PSC) manifestation; the Key Informant Interviews explain how and why those patterns occur; documentary analysis determines the extent to which continuity requirements are formally reflected in existing PCG plans; and the integrated evidence is translated into the architecture, management framework, and proposed Public Service Continuity Plan.

The verified quantitative dataset consisted of 306 respondents and a 33-item PSC scale organized under Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy. The qualitative strand consisted of 15 anonymized Key Informant Interviews analyzed narratively, while the documentary strand examined selected PCG LOIs, OPLANs, IMPLANs, and related planning documents against the same 5R continuity requirements. The three strands were integrated through joint display, meta-inference, and a Strength–Gap Matrix.

The respondent profile provides descriptive context rather than causal explanation. It includes headquarters and field perspectives; operational, technical, training, and support functions; a range of position and service categories; and a near-balanced distribution of personnel with and without direct crisis/continuity-planning involvement. The subsequent SOP analyses therefore reflect both those who directly plan for continuity and those who experience its arrangements through operations and support functions.

Table 8. *Profile of the 306 Survey Respondents*

	Profile variable	Category	Frequency (n) / Percentage
1.	Assigned unit / command cluster	National Headquarters	176 / 57.5%
		CGD National Capital Region	90 / 29.3%
		CGD Central Visayas	25 / 8.2%
		CGD Southwestern Mindanao	15 / 4.9%
2.	Functional area	Maritime Safety	29 / 9.5%
		Maritime Security & Law Enforcement	39 / 12.7%
		Marine Environmental Protection	20 / 6.5%
		Fleet	33 / 10.8%
		Aviation	12 / 3.9%
		Education/Training/Doctrine	72 / 23.5%
		Administration/Support	101 / 33.0%
3.	Category of position	Command/Senior Officer	66 / 21.6%
		Junior Officer	216 / 70.6%
		Senior Non-officer	5 / 1.6%
		Non-officer	19 / 6.2%
4.	Length of service	Under 5 years	53 / 17.3%
		5–10 years	104 / 34.0%
		11–20 years	112 / 36.6%
		Over 20 years	37 / 12.1%
5.	Direct involvement in crisis/continuity planning	Yes	158 / 51.6%

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No	148 / 48.4%

The respondent distribution shows that the quantitative assessment drew from all four study clusters and from a wide range of PCG functional areas. National Headquarters constituted the largest share of respondents, followed by CGD National Capital Region, while the two other District clusters supplied the remaining field representation. Functionally, Administration/Support and Education/Training/Doctrine formed the largest groups, but the sample also included respondents from maritime safety, maritime security and law enforcement, marine environmental protection, fleet, and aviation. This distribution provides both headquarters-level and operational/technical perspectives on continuity practices.

In terms of position and experience, junior officers formed the largest position category, while command/senior officers, senior non-officers, and non-officers were also represented. The length-of-service profile indicates substantial institutional experience: the largest group had 11–20 years of service, followed by those with 5–10 years. Respondents with over 20 years and those with under 5 years added senior institutional memory and newer organizational perspectives, respectively. Most importantly for the interpretation of the PSC assessment, the sample was nearly balanced in direct crisis/continuity-planning involvement: 51.5 percent reported direct involvement and 48.5 percent reported no direct involvement. This allows the quantitative findings to reflect both the views of personnel directly engaged in planning and those who experience continuity arrangements through operational, technical, supervisory, training, or support functions.

Taken together, the respondent profile demonstrates that the 306-person dataset represents different organizational locations, functions, position categories, service experience levels, and degrees of direct planning involvement. The profile is therefore used as descriptive context for the succeeding analysis. The substantive assessment begins with Research Question 1, which examines the level of manifestation of Public Service Continuity across the five Rs.

Level of Public Service Continuity reflected in PCG crisis planning in terms of: (a) Risk Assessment; (b) Resources; (c) Responsibilities; (d) Recovery; and (e) Restoration of Normalcy

This section addresses the level of Public Service Continuity (PSC) in terms of Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy. Consistent with an explanatory sequential mixed-methods design, each 5R dimension is presented as one integrated argument: the quantitative item pattern establishes the level of manifestation; KII excerpts explain how that pattern is experienced in practice; documentary evidence tests whether it is formally reflected in existing plans; related literature situates the convergent or divergent evidence; and the theory lens culminates the interpretation. The overall five-dimensional composite is presented only after the five dimensions have been examined.

The quantitative dataset comprised 306 respondents and the PSC scale contained 33 items across the five 5R dimensions. The qualitative strand comprised 15 Key Informant Interviews, while the documentary strand reviewed selected PCG LOIs, OPLANs, IMPLANs, and related planning documents.

Risk Assessment

The Risk Assessment dimension examined the extent to which existing Philippine Coast Guard (PCG) crisis-planning arrangements identify hazards and vulnerabilities, determine their potential effects on operations, recognize critical internal and external dependencies, maintain current risk information, identify mission-essential functions, and establish the interruption and service thresholds necessary to sustain those functions during disruption. Across its seven indicators, Risk Assessment obtained an overall weighted mean of 2.52 (SD = 0.61), interpreted as Manifested, and ranked second among the five Public Service Continuity (PSC) dimensions. The result establishes Risk Assessment as one of the stronger elements of the PCG's existing continuity posture.

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The item-level pattern, however, reveals that this strength is not uniform across the full continuity-risk process. The strongest results were recorded for the assessment of vulnerabilities and potential continuity impacts (WM = 2.64, SD = 0.66) and the systematic identification and assessment of hazards and threats (WM = 2.64, SD = 0.68), followed by the identification and assessment of critical internal and external dependencies (WM = 2.53, SD = 0.77). All three were interpreted as Manifested. In contrast, the identification and prioritization of mission-essential functions (WM = 2.49), periodic updating of risk information or risk registers (WM = 2.49), establishment of acceptable minimum service levels (WM = 2.48), and determination of maximum tolerable downtime and recovery targets (WM = 2.38) were only Slightly Manifested.

This pattern indicates that the PCG is comparatively capable of identifying what threats, vulnerabilities, and dependencies may affect operations, but is less consistent in predetermining which organizational functions must continue, at what minimum level they must operate, and how long their disruption can be tolerated. The overall Manifested rating therefore reflects an established operational risk-assessment capability, while the lower-rated indicators reveal an incomplete transition toward a more formal continuity-impact or business-impact orientation.

Table 9. *Level of Manifestation of Public Service Continuity in Terms of Risk Assessment*

Risk Assessment Indicator	Weighted Mean	SD	Rank	Interpretation
1. Hazards and threats affecting PCG operations are systematically identified and assessed.	**2.64**	0.68	2	Manifested
2. Vulnerabilities and potential continuity impact of disruption on PCG operations are assessed.	**2.64**	0.66	1	Manifested
3. Mission-essential functions and their priorities during disruption are identified.	**2.49**	0.72	5	Slightly Manifested
4. Critical internal and external dependencies necessary to sustain essential functions are identified and assessed.	**2.53**	0.77	3	Manifested
5. Risk information or risk registers are periodically reviewed and updated to reflect changing conditions.	**2.49**	0.74	6	Slightly Manifested
6. Maximum tolerable downtime and recovery targets for essential functions are determined.	**2.38**	0.73	7	Slightly Manifested
7. Acceptable minimum service levels for essential functions during disruption are established.	**2.48**	0.73	4	Slightly Manifested
Overall Risk Assessment	**2.52**	**0.61**	**2***	**Manifested**

Note. N = 306. Item SDs represent the dispersion of responses to each indicator. The overall SD (0.61) is based on the respondents' seven-item Risk Assessment dimension means. Interpretation follows the study's norm-based four-point scale: 3.51–4.00 = Highly Manifested; 2.51–3.50 = Manifested; 1.51–2.50 = Slightly Manifested; 1.00–1.50 = Not Manifested. The overall rank of 2 refers to the position of Risk Assessment among the five PSC dimensions.

The highest-rated indicator, assessment of vulnerabilities and potential continuity impacts of disruption on PCG operations (WM = 2.64, SD = 0.66; Rank 1), indicates that respondents generally recognize an established capability within the PCG to consider how threats and vulnerabilities may affect operational performance. Its relatively strong rating is consistent with the operational character of the organization, where planning routinely requires commanders and staffs to anticipate the consequences of maritime incidents, natural hazards, security threats, infrastructure failures, and other contingencies.

The Key Informant Interviews reinforce this strength while clarifying its orientation. Informants consistently described threat scanning, vulnerability awareness, and incident assessment as established features of operational planning. Key Informant 2 observed that risk assessment is relatively mature in supporting operations, but also qualified that this maturity remains focused more strongly on operational

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threats than on the consequences of disruption to the organization's own continuity. Thus, the survey result appropriately reflects a genuine institutional strength, but the KII evidence shows that the concept of "continuity impact" is still interpreted primarily through the effect of hazards on operations rather than through a systematic analysis of how internal organizational disruption affects the continuing delivery of essential services.

The documentary evidence follows the same pattern. Reviewed PCG plans routinely identify operational contingencies, environmental and security conditions, deployment considerations, command relationships, and anticipated operational risks. These provisions reinforce the Manifested result because they demonstrate that risk awareness is already embedded within PCG planning. However, the documents provide less consistent evidence that identified vulnerabilities are subsequently translated into formal continuity requirements for specific organizational functions.

This distinction is significant under Continuity Management Theory. Risk assessment is not completed when an organization merely determines that a hazard can disrupt operations. The analysis must progress to determining what organizational capability is affected, how seriously it is affected, what dependencies are involved, and what continuity arrangement is necessary to prevent unacceptable service interruption. The high rating of this indicator therefore represents a strong starting point for PSC, while also indicating that the existing operational-risk discipline must be extended further into formal continuity-impact analysis.

The second-ranked indicator, systematic identification and assessment of hazards and threats affecting PCG operations (WM = 2.64, SD = 0.68), reinforces this institutional strength. Hazard and threat identification is fundamental to Coast Guard operations because maritime safety, security, law enforcement, marine environmental protection, disaster response, and other missions require continuous awareness of changing operational conditions. The rating suggests that the organization is accustomed to asking what can threaten a mission and incorporating such considerations into operational planning.

The KIIs strongly support this interpretation. Informants consistently described incident awareness and threat scanning as routine parts of planning. Key Informant 11 similarly explained that existing plans generally emphasize deployment, command and control, and response procedures, demonstrating that threats are typically analyzed in relation to the actions necessary to respond to them. This helps explain why Risk Assessment as a dimension ranked second overall.

The documentary findings likewise demonstrate that operational plans commonly contain external hazards, contingencies, command arrangements, coordination requirements, and anticipated operational risks. These provisions substantiate the quantitative result and indicate that risk identification is not simply an informal professional practice but is reflected within formal PCG planning documents.

Paton (2009) provides an important theoretical qualification, however, by emphasizing that risk assessment must ultimately inform strategies designed to reduce interruption to organizational activities. Thus, identifying a typhoon, maritime accident, armed threat, infrastructure failure, or other hazard is only the first stage of continuity analysis. The succeeding question is what happens to the PCG's own essential functions when that hazard disrupts personnel, facilities, communications, logistics, command systems, or partner support.

The two highest-rated indicators therefore jointly reveal an important institutional advantage: the PCG already possesses the habit and discipline of looking for threats and vulnerabilities. The developmental requirement is not to replace this capability, but to redirect part of it inward toward the vulnerability of the organization itself.

The third Manifested indicator, identification and assessment of critical internal and external dependencies necessary to sustain essential functions (WM = 2.53, SD = 0.77; Rank 3), suggests that respondents generally recognize that PCG functions depend upon personnel, facilities, communications, logistics, information, partner agencies, and other enabling systems. This finding is important because

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continuity failures frequently occur not from the direct effect of a hazard on the essential function itself, but through the failure of one of its supporting dependencies.

The KII evidence confirms that such dependencies are recognized operationally. Informants described vulnerabilities involving facilities, communications, staffing, logistics, geographically dispersed units, and reliance on other Coast Guard units and external partners. They also explained that these dependencies are frequently managed through coordination, adaptation, redistribution, or interagency assistance when disruption occurs.

The same qualitative evidence, however, qualifies the Manifested rating. Dependencies may be recognized and managed operationally without being formally mapped as continuity dependencies. Key Informant 11's observation that plans emphasize response and command-and-control arrangements while giving less explicit attention to sustaining the organization when headquarters, communications, or key personnel are disrupted illustrates this distinction. The PCG may know, for example, that a station depends on communications support, logistics, power, transportation, or a partner agency, but this does not automatically mean that the consequences of losing that dependency, its acceptable outage period, or the required alternative have been formally predetermined.

The documentary evidence reinforces this qualification. Coordination mechanisms, augmentation, support relationships, and operational dependencies appear in existing plans, but the reviewed documents contain less consistent evidence of a formal dependency-failure analysis that identifies what happens to a mission-essential function when a critical dependency becomes unavailable.

This is precisely where ISO 22301:2019 extends ordinary risk assessment into continuity management. Priority activities must be understood together with the resources and dependencies that sustain them. From this perspective, dependency identification becomes meaningful only when the organization can determine which dependency is critical, what happens when it fails, how long the function can tolerate its loss, and what alternate arrangement must be available. Thus, the Manifested rating reflects an established awareness of interdependency, while the evidence indicates that this awareness has not yet been converted uniformly into formal continuity dependency mapping.

The fourth-ranked indicator, acceptable minimum service levels for essential functions during disruption are established (WM = 2.48, SD = 0.73), marks a significant shift in the pattern. Although the PCG is relatively strong in identifying risks and dependencies, respondents were less certain that the organization has predefined the minimum level at which essential services must continue during disruption.

This result is critical because continuity does not always require an organization to maintain full normal capacity. During severe disruption, some functions may be reduced, deferred, relocated, or delivered through alternative arrangements. However, continuity management requires the organization to determine in advance which functions cannot fall below a specified minimum level.

The KII evidence helps explain the lower rating. Informants described PCG units as capable of adapting during disruption through command initiative, improvisation, inter-unit support, and interagency coordination. These adaptive practices allow the organization to preserve operational capability even when normal arrangements are degraded. Yet the accounts provide less evidence that the minimum acceptable level of service has been formally predetermined for each essential function. In practice, the level of service that can be sustained may therefore be determined during the disruption based on available personnel, facilities, communications, and logistics.

The documentary evidence provides the same qualification. Reviewed plans contain detailed operational tasks and response requirements, but they provide less consistent evidence of predefined function-level minimum service standards specifying what must continue even when full capability cannot be maintained.

Viewed through Continuity Management Theory, this represents a key transition from responding to conditions toward predetermining continuity requirements. The essential question is not merely whether a function continues, but what minimum output, capability, service, or response level must remain available

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for the organization to fulfill its critical public-service obligations. The Slightly Manifested result therefore identifies an important requirement for formal PSC planning.

The fifth-ranked indicator, mission-essential functions and their priorities during disruption are identified (WM = 2.49, SD = 0.72), is closely related. The rating lies just below the Manifested threshold, suggesting that PCG personnel generally recognize which activities are important during emergencies but that a formal and organization-wide mission-essential-function prioritization system is not yet consistently institutionalized.

This distinction is fundamental. Operational plans naturally identify important missions and assign priorities during particular incidents. Continuity planning, however, requires the organization to identify its own functions that must continue regardless of the type of disruption. These may include command and control, maritime emergency coordination, communications, critical administrative support, logistics, information management, personnel support, financial processes, and other functions whose prolonged loss would seriously impair the PCG's statutory responsibilities.

Key Informant 2's distinction between mature operational risk assessment and less-developed organizational continuity assessment directly explains this result. The PCG is accustomed to prioritizing missions against external threats, but less consistently applies a formal process for identifying and ranking the internal functions whose continued availability enables those missions.

The documentary analysis reinforces this point. Existing plans clearly identify operational objectives, tasks, and responsibilities, yet the reviewed corpus provides less consistent evidence of a formal mission-essential-function register applicable across disruptions. The plans therefore answer “What must we do in this operation?” more clearly than “What organizational functions must never be allowed to stop, regardless of the incident?”

ISO 22301:2019 gives this finding particular theoretical importance because continuity requirements begin with the identification of priority activities. Without this step, resource assurance, succession planning, recovery targets, alternate facilities, communications redundancy, and restoration priorities cannot be systematically linked to what the organization actually needs to sustain. Thus, the Slightly Manifested rating identifies a foundational gap: risk information exists, but the functions that the information is supposed to protect are not yet consistently formalized and prioritized from a continuity perspective.

The sixth-ranked indicator, periodic review and updating of risk information or risk registers to reflect changing conditions (WM = 2.49, SD = 0.74), further indicates that risk awareness may be stronger as an operational practice than as a recurring continuity-management system. PCG operational environments change continuously as hazards, infrastructure, force disposition, technology, stakeholder relationships, and organizational arrangements evolve. Risk information therefore loses continuity value if it is captured once but not periodically reviewed.

The KII findings suggest that experienced PCG personnel compensate for changing conditions through situational awareness, professional judgment, command initiative, and adaptation. This adaptive capacity helps explain how the organization can continue operating even where formal continuity-risk records are incomplete. However, reliance on current awareness and experience differs from maintaining a structured risk register that records changing continuity threats, vulnerabilities, dependencies, controls, and residual risks over time.

The documentary findings are consistent with this interpretation. The reviewed documents contain operational risk considerations and changing situational requirements, but less consistent evidence of continuity-specific risk registers with predetermined review cycles. Consequently, relevant risk knowledge may exist within commands and planning staffs without necessarily being consolidated into a recurring institutional continuity-risk process.

Continuity Management Theory requires precisely this transition. Risk assessment must operate as a continuous management activity rather than as a one-time planning input. Risk registers should therefore

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be reviewed whenever organizational functions, infrastructure, technology, personnel, dependencies, operating environments, or external conditions materially change. In this sense, the Slightly Manifested result is less about the absence of risk information than about the institutional discipline for maintaining that information as a living continuity-management resource.

The lowest-rated indicator, maximum tolerable downtime and recovery targets for essential functions are determined (WM = 2.38, SD = 0.73; Rank 7), represents the clearest quantitative gap within Risk Assessment. This result is particularly consequential because it concerns the conversion of risk awareness into a measurable continuity requirement.

An organization may correctly identify a hazard, understand a vulnerability, recognize its dependencies, and even know which function is important; yet continuity planning remains incomplete unless it can determine how long that function may be unavailable before the consequences become unacceptable and how quickly it must therefore be recovered.

The KIIs directly support this interpretation. Informants consistently distinguished the PCG's mature operational threat awareness from the less-developed assessment of organizational continuity requirements. Their accounts suggest that decisions concerning continued service, alternative arrangements, and recovery may often be made dynamically during an incident rather than against predetermined function-specific thresholds.

The reviewed planning documents similarly contain operational response timelines, deployment requirements, command relationships, and mission tasks, but provide less consistent evidence of maximum tolerable downtime and function-level recovery targets. The documentary gap therefore aligns closely with the lowest quantitative result.

This finding is central to both ISO 22301:2019 and Continuity Management Theory. Continuity-impact analysis requires an organization to understand how the consequences of interruption increase over time. This permits management to determine when disruption becomes unacceptable and to set recovery priorities accordingly. Without such thresholds, all important functions may appear equally urgent, making it difficult to prioritize limited resources during severe disruption.

Taken together, the seven indicators reveal a coherent continuum within the Risk Assessment dimension. The PCG is strongest in assessing vulnerabilities and continuity impacts (2.64), identifying hazards and threats (2.64), and recognizing critical dependencies (2.53). The results decline when risk assessment must be translated into explicit continuity requirements: mission-essential functions (2.49), updated risk registers (2.49), acceptable minimum service levels (2.48), and maximum tolerable downtime and recovery targets (2.38).

This pattern explains why Risk Assessment can legitimately be rated Manifested and rank second among the five PSC dimensions while still containing significant developmental gaps. The quantitative findings demonstrate an established organizational competence in recognizing risk. The qualitative evidence explains that this competence remains principally operational in orientation. The documentary evidence confirms that hazards, contingencies, risks, and operational dependencies are incorporated into formal planning, while providing less consistent evidence of continuity-specific function registers, dependency-failure analysis, service thresholds, recovery targets, and recurring continuity-risk review.

The integrated evidence therefore identifies an important institutional distinction: the PCG is more mature in assessing what can threaten its operations than in determining what must continue when the organization itself is disrupted. This distinction is consistent with Paton (2009), who treats risk assessment as a basis for reducing interruption to organizational activities, and with ISO 22301:2019, which connects risk analysis to priority activities, dependencies, continuity requirements, and recovery. Under these principles, risk assessment must progress beyond asking What can happen? toward answering a more operationally consequential set of questions: What must continue? What does it depend upon? How much service must be maintained? How long can interruption be tolerated? How quickly must the function recover?

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Viewed through the study's Continuity Management Theory lens, this represents the movement from risk recognition to continuity decision-making. The value of a risk assessment is ultimately measured by whether it produces predefined institutional decisions before the disruption occurs. Hazard information must therefore be converted into prioritized mission-essential functions, identified dependencies, acceptable minimum service levels, maximum tolerable downtime, recovery targets, and periodically updated continuity-risk controls.

The complementary lens of organizational resilience and adaptive capacity explains why the absence of complete formalization has not prevented PCG operations from continuing during disruption. Commanders and personnel compensate through experience, initiative, improvisation, inter-unit support, and interagency coordination. Such behavior demonstrates considerable resilience. However, adaptive capacity is strongest when it supplements rather than substitutes for formal continuity arrangements. Institutionalizing continuity thresholds would therefore not diminish operational flexibility; rather, it would give commanders a clearer predetermined basis for deciding what must be protected first, what may be temporarily reduced, and what must be recovered within specified periods.

The convergence of the quantitative, qualitative, documentary, literary, and theoretical evidence therefore produces the following meta-inference: The PCG possesses a comparatively mature operational risk-assessment capability, but this capability has not yet been fully transformed into an institutionalized continuity-impact analysis system that defines what must continue, at what level, and within what recovery timeframe.

This meta-inference reframes the developmental requirement. The PCG does not need to create an entirely new risk-assessment discipline. Existing operational risk awareness provides a strong institutional foundation. The requirement is to extend that discipline inward, from hazards affecting missions to disruption affecting the organizational functions that enable those missions.

Accordingly, the PCG should formally identify and prioritize its mission-essential functions, map the internal and external dependencies supporting each function, maintain and periodically review a continuity-specific risk register, establish acceptable minimum service levels, determine maximum tolerable downtime and appropriate recovery targets, and link these requirements to corresponding personnel, facilities, communications, information, logistics, finance, and alternate arrangements.

This integrated finding provides the empirical and theoretical foundation for the Assess component of the proposed A3R2 Continuity Management Framework. Assess should therefore not be limited to identifying external hazards or operational threats. It must establish the institutional baseline for continuity by determining what the PCG cannot afford to lose, what can cause its loss, what dependencies sustain it, how much degradation is acceptable, and how quickly capability must be restored.

As the first component of A3R2, Assess becomes the decision foundation for the succeeding stages. It identifies what must continue; Assure secures the people, facilities, systems, information, logistics, financing, and redundancies necessary to sustain it; Assign ensures that responsibility and capability remain available; Recover restores disrupted essential functions within defined priorities and targets; and Restore returns the organization to a verified and improved normal condition. In this manner, the existing strength of PCG operational risk assessment becomes the entry point for a complete continuity-management cycle rather than remaining primarily an incident-response planning function.

Resources

The Resources dimension assessed whether the PCG possesses and can sustain the personnel, facilities, communications, logistics, information, financial support, and mutual-aid arrangements necessary to maintain essential functions during disruption. Based on the responses of the 306 respondents, Resources obtained an overall weighted mean of 2.33 (SD = 0.64), interpreted as Slightly Manifested, and ranked fifth among the five Public Service Continuity (PSC) dimensions. As the lowest-rated dimension, Resources represents the most significant relative weakness in the PCG's assessed continuity posture.

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The indicator pattern, however, does not suggest that the PCG lacks operational resources. Of the seven indicators, personnel and leadership depth was the only indicator rated Manifested (WM = 2.53). The remaining six indicators – alternate work locations, protection and retrievability of essential records, mutual-aid arrangements, communications redundancy, logistics and mobility support, and rapid financial resourcing – were all Slightly Manifested. The quantitative pattern therefore identifies a more precise issue: the PCG possesses personnel and operational resources that enable it to respond to emergencies, but the redundancy, accessibility, assurance, and endurance required to sustain those resources when normal organizational systems are themselves disrupted are less consistently institutionalized.

Table 10. *Level of Manifestation of Public Service Continuity in Terms of Resources*

	Resource Indicator	Weighted Mean	SD	Rank	Interpretation
1.	Personnel and leadership depth are sufficient to sustain essential functions.	**2.53**	0.75	1	Manifested
2.	Alternate work locations or continuity facilities are identified and usable.	**2.33**	0.83	2	Slightly Manifested
3.	Essential records and critical data are protected, backed up, and retrievable during disruption.	**2.32**	0.73	3	Slightly Manifested
4.	Mutual-aid or inter-unit support arrangements are in place for resource sharing.	**2.31**	0.70	4	Slightly Manifested
5.	Communications systems have redundancy for degraded conditions.	**2.30**	0.73	5	Slightly Manifested
6.	Fuel, transportation, vessels, aircraft, and logistics support are adequate for continuity operations.	**2.28**	0.76	6	Slightly Manifested
7.	Financial arrangements allow rapid resourcing during continuity operations.	**2.27**	0.72	7	Slightly Manifested
Overall Resources		**2.33**	**0.64**	**5***	**Slightly Manifested**

Note. N = 306. Item SDs represent the dispersion of responses for each indicator. The overall SD represents the dispersion of respondents' Resources dimension means. Rank 5 refers to the position of Resources among the five PSC dimensions.

The highest-rated indicator, personnel and leadership depth sufficient to sustain essential functions (WM = 2.53, SD = 0.75; Rank 1), was the only resource indicator interpreted as Manifested. This indicates that the PCG's strongest continuity resource resides in its people and leadership structure. Respondents generally recognized sufficient human and leadership capacity to maintain essential functions, although the SD of 0.75 suggests that this capacity is not experienced uniformly across commands and locations.

The interviews reinforce this strength while simultaneously defining its limits. Key Informant 1 characterized PCG personnel as committed, adaptable, and mission-oriented, while Key Informant 2 explained that personnel and operational assets are strategically distributed and can be shared or augmented among units during emergencies. This human-resource strength helps explain how PCG operations continue even when individual units experience resource constraints. However, Key Informant 1 also observed that "Remote stations often operate with minimum personnel, aging infrastructure, limited logistics support, and constrained communications capability." Thus, the Manifested result should not be interpreted as evidence of uniform staffing redundancy. Rather, personnel and leadership capacity are comparatively stronger than the other resource components, while staffing depth, trained alternates, and endurance during prolonged disruption remain uneven.

The documentary evidence produces the same qualification. Existing PCG plans generally identify personnel requirements, task organizations, command arrangements, deployment mechanisms, and augmentation requirements. These provisions demonstrate an established ability to mobilize personnel for

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operational missions. However, augmentation is predominantly oriented toward meeting incident-specific operational requirements, with less consistent evidence of predetermined staffing depth, cross-trained alternates, or reserve personnel specifically structured to maintain mission-essential organizational functions during prolonged disruption.

This distinction is important when viewed through Continuity Management Theory. Personnel become a continuity resource not simply because they are available for deployment, but because the organization has determined in advance which competencies are indispensable to each mission-essential function, how many personnel are required to sustain that function, who can serve as alternates, and how staffing can be maintained if primary personnel become unavailable. The finding therefore identifies PCG personnel and leadership as an important resilience strength while also indicating the need to convert human-resource adaptability into formally assured continuity staffing.

The second-ranked indicator, alternate work locations or continuity facilities are identified and usable (WM = 2.33, SD = 0.83), was only Slightly Manifested. Its SD of 0.83 – the highest among all seven indicators – further suggests considerable variation in the availability and readiness of alternate facilities across PCG units. Some organizational elements may have practical alternatives when their primary locations become unusable, while others may depend largely on improvised relocation arrangements.

The KIIs strongly explain this result. Key Informant 2 specifically identified limited provisions for alternate operating facilities as a continuity weakness, while Key Informant 3 reported that dedicated alternate operating locations had not yet been comprehensively institutionalized. Key Informants 4, 8, and 10 similarly recognized the availability of operational resources but emphasized that alternate operating capabilities and backup support systems require further strengthening. The recurring qualitative pattern therefore indicates that relocation may be achievable through operational adaptation, but predetermined, equipped, and tested continuity facilities are less consistently available.

The operational experience recounted by Key Informant 3 illustrates the consequence. During Typhoon Odette and subsequent severe weather events, several Coast Guard stations experienced damaged facilities, communication interruptions, transportation constraints, and personnel shortages. Operational response continued, demonstrating considerable resilience, but sustaining administrative support, communications, staffing, and other essential internal functions required arrangements developed during the incident rather than execution of predetermined continuity procedures.

This distinction reflects a central principle in continuity literature. Whitworth (2006) emphasizes geographic dispersion and alternate arrangements because a continuity capability must remain functional when its primary location is inaccessible or damaged. From this perspective, an alternate facility is not simply another available government building. It becomes a continuity resource only when it has been identified beforehand, linked to mission-essential functions, provided with the required communications and information access, assigned personnel, and periodically validated for usability. The quantitative result therefore suggests that the PCG's ability to relocate is more developed as an adaptive response than as an assured institutional capability.

The third indicator, essential records and critical data are protected, backed up, and retrievable during disruption (WM = 2.32, SD = 0.73), exposes another critical continuity dependency. The Slightly Manifested result suggests that information needed to sustain essential functions may be protected or backed up to some extent, but reliable accessibility under degraded conditions is not yet uniformly assured.

The interviews consistently reinforce this concern. Key Informant 2 identified protected records management and redundant administrative systems among the areas requiring further development, while Key Informant 3 similarly cited protected records systems and redundant administrative capabilities as continuity gaps. Key Informant 5 extended the concern to alternate learning platforms and redundant information systems. Across these accounts, the issue is not merely whether records exist or whether routine information systems are operational, but whether critical information remains accessible when primary offices, networks, equipment, or personnel become unavailable.

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The documentary evidence follows the same pattern. Information and reporting requirements are routinely addressed in operational plans, confirming that the PCG recognizes information as essential to command and operations. However, the reviewed documents provide less consistent evidence of a systematic continuity process for identifying vital records, establishing backup arrangements, protecting critical data, and ensuring rapid recovery or alternate access when primary systems or facilities are unavailable.

This finding is particularly significant under ISO 22301:2019 and Continuity Management Theory. Information becomes a continuity resource when it is deliberately linked to a priority activity and protected against the failure of its normal storage or access mechanism. The critical requirement is therefore not simply to maintain records but to determine which records and data are indispensable to each mission-essential function, where redundant copies are maintained, who may access them, how they are protected, and how quickly they can be recovered during disruption. The Slightly Manifested result consequently points to the need to move from general records management toward explicit vital-record and critical-information continuity arrangements.

The fourth-ranked indicator, mutual-aid or inter-unit support arrangements for resource sharing (WM = 2.31, SD = 0.70), demonstrates that resource sharing exists but remains more strongly embedded as an operational practice than as a predetermined continuity mechanism. The KIIs consistently recognized inter-unit augmentation and external coordination as important strengths. Key Informant 2 explained that resource-sharing mechanisms among stations and coordination with partner agencies are already employed during emergencies, while Key Informant 1 reported that prolonged operations often depend heavily on redistribution among PCG units and assistance from external partners.

This explains why mutual aid is Slightly Manifested rather than Not Manifested. Resource sharing is clearly occurring. However, Key Informant 1 also identified an important continuity risk: during widespread disasters, partner agencies may themselves face resource shortages, communication failures, infrastructure damage, or competing operational priorities. External assistance therefore cannot always be assumed to remain immediately available when the PCG itself is affected.

The documentary evidence similarly shows inter-unit coordination, augmentation, and external-agency cooperation, but these arrangements appear stronger as operational coordination mechanisms than as formal continuity agreements specifying activation conditions, minimum resource commitments, responsibilities, duration of support, and alternatives if the supporting organization is simultaneously affected. The finding therefore distinguishes mutual aid as a resilience mechanism from mutual aid as an assured continuity resource.

Organizational resilience helps explain why the existing arrangement has nevertheless supported operational performance. PCG units redistribute assets, coordinate laterally, request augmentation, and use partner relationships to overcome local shortages. These mechanisms demonstrate considerable adaptive capacity. Yet Continuity Management Theory requires external dependencies to be assessed before disruption occurs. Mutual aid should therefore complement internal redundancy rather than substitute for it, particularly during large-scale events affecting several agencies or geographic areas simultaneously.

The fifth indicator, communications systems have redundancy for degraded conditions (WM = 2.30, SD = 0.73), identifies another important continuity vulnerability. Communications systems are central to PCG command, coordination, reporting, operational control, and interagency engagement. The Slightly Manifested result does not indicate the absence of communications capability; rather, it suggests that the availability of reliable failover mechanisms when primary systems are degraded is uneven.

Key Informant 1 acknowledged that multiple communication systems provide some redundancy but simultaneously identified constrained communications capability in remote stations. Key Informant 3's account of Typhoon Odette further demonstrated that communications interruptions occurred alongside facility damage, transportation constraints, and personnel shortages. Key Informants 8 and 10 likewise identified redundant systems and backup support as areas requiring improvement.

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The documentary evidence confirms that communications procedures are commonly incorporated into operational plans, demonstrating that communications are integral to PCG operational planning. What is less consistently evident is a continuity-specific architecture identifying primary, secondary, and tertiary communications methods, their activation conditions, alternative power sources, interoperable systems, and procedures for maintaining communication when normal infrastructure fails.

Whitworth's (2006) emphasis on redundant communications is directly relevant. From a continuity perspective, the presence of communication equipment under normal conditions is insufficient; redundancy must be designed around the possibility that the primary mode itself will fail. Thus, the quantitative result reinforces the requirement for communications planning to progress from operational availability toward tested failover capability.

The sixth-ranked indicator, adequacy of fuel, transportation, vessels, aircraft, and logistics support for continuity operations (WM = 2.28, SD = 0.76), reflects a similar distinction between operational resource mobilization and resource endurance. The PCG possesses vessels, aircraft, vehicles, logistics systems, and mechanisms for deploying and supporting operational personnel. The KIIs consistently recognized these resources as important strengths during emergency operations.

Key Informant 4 stated that Operational resources are generally well managed for emergency response. Key Informants 2 and 3 similarly identified vessels, communications equipment, logistics, and other assets as supporting operational requirements. Yet the same informants emphasized that continuity-specific resource planning and dedicated continuity logistics remain underdeveloped.

The documentary findings reinforce this qualification. Existing plans provide mechanisms for deploying personnel and assets and meeting operational logistical requirements. What they do not consistently establish are the duration, reserve levels, alternate supply sources, replacement arrangements, and logistical redundancies required when normal supply systems themselves are interrupted. A vessel may be available, for example, but its continuity value ultimately depends on fuel, crew availability, maintenance support, spare parts, communications, access to operating bases, and supporting logistics remaining available throughout the disruption.

Continuity Management Theory therefore shifts the analytical question from resource possession to resource endurance. The relevant issue is not simply whether the PCG has vessels, aircraft, vehicles, fuel, or logistics support, but whether the organization can determine how long each mission-essential function can continue when normal supply chains fail and what alternative arrangements are activated before capability falls below an acceptable level.

The lowest-rated indicator was financial arrangements allowing rapid resourcing during continuity operations (WM = 2.27, SD = 0.72; Rank 7). This represents the weakest specific component within the Resources dimension. Its position suggests that even where continuity requirements can be identified operationally, the ability to translate those requirements into immediately accessible financial support during disruption is less consistently assured.

The broader evidence supports this interpretation insofar as the KIIs repeatedly described continuity resources as being mobilized through redistribution, augmentation, adaptation, and incident-based decision-making rather than through a fully predefined continuity-resource system. The reviewed plans likewise demonstrate operational resource mobilization but provide less consistent evidence of dedicated continuity reserves or emergency financial mechanisms specifically designed to sustain mission-essential functions when normal resourcing processes are disrupted.

The theoretical significance is substantial. ISO 22301:2019 treats resources as an integrated requirement supporting priority activities; financial capacity is therefore not separate from continuity capability. Personnel cannot be augmented, alternate facilities cannot be activated, equipment cannot be replaced, communications cannot be restored, and emergency logistics cannot be sustained unless the organization possesses an appropriate mechanism to release or redirect resources within the required

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timeframe. Financial arrangements therefore constitute an enabling continuity resource whose weakness can constrain several other resource categories simultaneously.

Taken together, the seven indicators reveal a consistent hierarchy. The PCG is comparatively strongest in its human and leadership resources (2.53), while alternate facilities (2.33), vital records and critical data (2.32), mutual aid (2.31), communications redundancy (2.30), logistics and mobility (2.28), and rapid financial resourcing (2.27) remain Slightly Manifested. The numerical progression indicates that the organization is more strongly positioned in the human capacity to adapt and respond than in the physical, technological, informational, logistical, and financial redundancies required to sustain operations when normal systems fail.

This pattern is consistently reinforced by the KIIs. Informants did not portray the PCG as resource-deficient in an absolute sense. They repeatedly recognized the availability of personnel, vessels, communications equipment, logistical assets, inter-unit sharing, and partner support. What they distinguished was the difference between resources organized for immediate emergency response and resources specifically predefined, redundant, accessible, and sustainable for prolonged organizational continuity. Key Informant 2 captured this distinction directly: “Nevertheless, continuity-specific resource planning remains underdeveloped.”

The documentary evidence leads to the same conclusion. Existing PCG plans demonstrate an established capacity for resource mobilization through personnel deployment, logistics, communications, transportation, augmentation, coordination, and external support. What is less consistently formalized are the arrangements required when the PCG's own supporting systems become degraded: alternate operating facilities, communications failover, vital-record recovery, predefined staffing depth, continuity reserves, emergency financing, and formal mutual-aid commitments.

The resulting pattern is fully consistent with continuity literature. Whitworth (2006) emphasizes that continuity capability requires more than the resources used during ordinary operations; it requires geographic dispersion, alternate personnel, redundant communications, and protection of vital information. Similarly, ISO 22301:2019 connects resources directly to the requirements of priority activities. The critical continuity question is therefore not simply “What resources does the PCG possess?” but “Which resources must remain available to sustain each mission-essential function when normal arrangements fail?”

Viewed through the study's primary Continuity Management Theory lens, the Resources finding represents the necessary progression from resource availability to resource assurance. Once Risk Assessment establishes which mission-essential functions must continue and identifies their vulnerabilities and dependencies, the organization must determine the personnel, facilities, communications, information, logistics, financing, and external support necessary to sustain those functions. It must then identify single points of failure and establish alternates, reserves, redundancies, and activation mechanisms before disruption occurs.

The complementary lens of organizational resilience and adaptive capacity explains why the resource gaps identified by the survey have not necessarily resulted in operational failure. PCG personnel compensate through leadership initiative, improvisation, redistribution, augmentation, inter-unit sharing, and external partnerships. This represents an important organizational strength. However, adaptability should reinforce planned redundancy rather than substitute for it. Reliance on improvisation becomes progressively more vulnerable as the duration, geographic extent, or severity of disruption increases.

The convergence of the evidence therefore leads to the central meta-inference: The PCG possesses considerable operational resource capacity, but operational resource availability has not yet been uniformly converted into institutional resource assurance for prolonged continuity.

This explains why Resources can rank fifth while the PCG continues to demonstrate effective operational response. The weakness is not principally the absence of people, vessels, aircraft, communications, logistics, facilities, information systems, financial resources, or partners. Rather, it concerns whether these resources have been pre-identified, linked to mission-essential functions, made

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redundant where necessary, protected against single points of failure, and assured for continued availability when primary systems are disrupted.

Accordingly, the developmental requirement is to move systematically from resources available for response to resources assured for continuity. Every mission-essential function identified under Risk Assessment should therefore be linked to its required personnel and trained alternates, primary and alternate operating sites, communications and failover systems, vital records and critical information, logistics and mobility requirements, financial support, and internal or external resource-sharing arrangements. The resulting dependencies should then be assessed for single points of failure, with identified gaps prioritized, costed, assigned, addressed, and periodically tested.

This integrated finding provides the empirical and theoretical basis for the "Assure" component of the proposed A3R2 Continuity Management Framework. Assure should therefore mean more than maintaining an inventory of available assets. Its purpose is to establish reasonable confidence that the people, facilities, systems, information, logistics, financing, and external support required by each mission-essential function will remain accessible and sustainable when normal arrangements fail.

The relationship between the first two components of A3R2 consequently becomes explicit: Assess determines what must continue and what can disrupt it; Assure determines what those functions require and secures the redundancy, alternatives, reserves, and support necessary to keep them functioning despite disruption. In this manner, the Resources finding transforms the lowest-rated PSC dimension into a specific institutional requirement: moving the PCG from a resource posture dependent largely on availability, augmentation, and adaptation toward one based on predefined, redundant, tested, and sustainable resource assurance.

Responsibilities

The Responsibilities dimension obtained an overall weighted mean of 2.53 (SD = 0.72), interpreted as Manifested, and ranked first among the five Public Service Continuity (PSC) dimensions. This establishes Responsibilities as the strongest dimension of the Philippine Coast Guard's assessed continuity posture. At the aggregate level, respondents generally perceived that authority, leadership succession, assignment of responsibilities, interagency coordination, and activation authority are already evident within existing PCG arrangements.

The item-level results, however, reveal an important internal pattern. The strongest indicators concern the formal transfer and exercise of authority: orders of succession obtained the highest rating (WM = 2.62), followed by delegations of authority (WM = 2.59) and clarity of continuity roles and responsibilities (WM = 2.58). Coordination and reporting responsibilities with partner agencies (WM = 2.53) and authority and triggers for plan activation (WM = 2.51) were likewise Manifested. In contrast, deliberate knowledge transfer (WM = 2.44) and role-specific checklists or job aids (WM = 2.43) were only Slightly Manifested. The quantitative pattern therefore suggests that the PCG is comparatively stronger in establishing who assumes responsibility and authority than in ensuring that the knowledge, procedures, relationships, and specialized capability required to exercise that responsibility are transferred with equal certainty.

Table 11. *Level of Manifestation of Public Service Continuity in Terms of Responsibilities*

	Responsibility Indicator	Weighted Mean	SD	Rank	Interpretation
1.	Orders of succession designate who assumes leadership when key officials are unavailable.	**2.62**	0.81	1	Manifested
2.	Delegations of authority specify which decisions may be made, by whom, and under what conditions.	**2.59**	0.77	2	Manifested
3.	Continuity roles and responsibilities are clearly assigned and understood.	**2.58**	0.80	3	Manifested

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	Responsibility Indicator	Weighted Mean	SD	Rank	Interpretation
4.	Coordination and reporting responsibilities with partner agencies are defined.	**2.53**	0.78	4	Manifested
5.	Authority and triggers for plan activation are clearly defined.	**2.51**	0.78	5	Manifested
6.	Knowledge transfer from experienced personnel to successors is deliberately managed.	**2.44**	0.77	6	Slightly Manifested
7.	Role-specific checklists or job aids support performance during disruption.	**2.43**	0.73	7	Slightly Manifested
Overall Responsibilities		**2.53**	**0.72**	**1***	**Manifested**

Note. N = 306. Item SDs describe the dispersion of responses for each indicator. The overall SD represents the dispersion of respondents' Responsibilities dimension means. Rank 1 refers to the position of Responsibilities among the five PSC dimensions.

The strongest indicator, orders of succession designating who assumes leadership when key officials are unavailable (WM = 2.62, SD = 0.81; Rank 1), demonstrates the comparative maturity of the PCG's command structure as a continuity mechanism. The finding indicates that respondents generally recognize an established chain through which leadership can pass when the normally responsible official is unavailable. The interviews strongly reinforce this result. Key Informant 1 stated that "The Coast Guard maintains a formal chain of command, and successors are designated for command positions." The same informant explained that authority can be transferred when commanders or senior officers become unavailable. Thus, the survey finding is not merely a perception of organizational hierarchy; it is supported by operational accounts of how command succession functions during disruption.

The significance of this result becomes clearer when interpreted through Continuity of Operations and Continuity Management Theory. Orders of succession are fundamental to organizational continuity because disruption must not create a leadership vacuum at the very moment when rapid decisions are required. The PCG's established command structure therefore represents a substantive PSC strength: the unavailability of one official does not automatically remove the command position or the organization's capacity to identify the next responsible authority.

The second-ranked indicator, delegations of authority specifying which decisions may be made, by whom, and under what conditions (WM = 2.59, SD = 0.77), reinforces this continuity-of-command architecture. Succession identifies who assumes the position, while delegation determines what authority the successor or alternate may exercise. The Manifested result suggests that the PCG generally possesses mechanisms through which decision-making authority can continue when normal command arrangements are disrupted.

This finding is reinforced by IMPLAN NR 002-2025, OPLAN BYAHENG AYOS: Synchronized National and Local Elections 2025, which provides detailed tasking across command and staff functions. The IMPLAN assigns D-1 responsibility for personnel augmentation, D-2 for intelligence support, D-3 for monitoring implementation, D-4 for logistical requirements, D-6 for funding, and D-7 for coordination and partner participation. More significantly, the plan expressly establishes command accountability by providing that "Commanders at all levels of command are held accountable and responsible for action or inactions relative to this plan." The document therefore translates organizational authority into specific operational accountability rather than leaving responsibility implied.

The survey, KII, and documentary evidence consequently reinforce one another. The PCG does not rely solely on informal assumptions concerning who should act during an operation; authority and accountability are routinely expressed through command relationships and formal tasking. This is consistent with continuity literature and ISO 22301:2019, which situates responsibility and authority within a broader management system in which roles must be defined, communicated, supported, and maintained so that

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priority activities can continue during disruption. The empirical strength of this indicator therefore provides evidence that the PCG already possesses an important organizational foundation upon which a formal PSC system can be built.

The third indicator, continuity roles and responsibilities are clearly assigned and understood (WM = 2.58, SD = 0.80; Rank 3), extends the strength beyond senior command succession to the broader distribution of operational responsibilities. Documentary evidence is particularly strong in this area. Letter of Instruction Nr. 0726-001, CGDSWM Annual General Inspection, assigns the Chief of District Staff overall responsibility for planning, preparation, coordination, supervision, and execution, including monitoring compliance with directives and taskings. Station and Sub-Station Commanders are required to exercise supervision and control within their respective Areas of Responsibility and ensure personnel familiarity with their duties under the Watch Quarter and Station Bill, emergency procedures, contingency plans, and unit SOPs. Detailed responsibilities are likewise distributed among individual staff offices.

The same institutional pattern appears in Letter of Instructions Nr. 0126-002, 1st CGDSWM Command Conference for C.Y. 2026, where D-1 is assigned program requirements, D-2 intelligence and security, D-3 monitoring of implementation, D-4 logistics, D-7/PIO documentation, D-11 communications equipment, and the District Command Center dissemination and monitoring responsibilities. These documents reinforce the quantitative result because they demonstrate that PCG plans ordinarily identify not only a commander but also the organizational elements responsible for supporting execution.

Viewed through the Continuity Management Theory lens, this represents an important progression from authority to ownership. Continuity cannot be sustained merely because a commander remains available; essential functions must have identifiable organizational owners. The existing PCG practice of distributing responsibilities across staff offices, Stations, Sub-Stations, and supporting elements therefore creates an institutional foundation for assigning continuity ownership to specific offices and personnel.

The fourth-ranked indicator, coordination and reporting responsibilities with partner agencies are defined (WM = 2.53, SD = 0.78), is particularly important because PCG operations rarely occur within a purely internal organizational environment. Maritime safety, security, law enforcement, disaster response, port operations, environmental protection, and other Coast Guard missions require sustained coordination with government agencies, local governments, port authorities, security organizations, private stakeholders, and communities.

The documentary evidence strongly reinforces this result. Letter of Instruction Nr. 0426-001, Kapihan sa Pantalan: Inter Agency Maritime and Port Information Sharing Mechanism in Sulu, designates the concerned Coast Guard Station as the unit primarily responsible for implementation and assigns responsibility for maintaining coordination with participating agencies and stakeholders, conducting monthly engagements, facilitating stakeholder participation, identifying operational issues, and submitting reports. Its implementing document, IMPLAN 0426-002, Kapihan sa Pantalan, further assigns Station Commanders responsibility for implementation within their AOR, stakeholder coordination, monthly sessions, identification of operational concerns, and submission of monthly reports. The IMPLAN also prescribes immediate reporting of significant maritime incidents, lateral interagency coordination, and adjustments through FRAGO.

Similarly, OPLAN BYAHENG AYOS directs Station Commanders to submit daily accomplishment and situation reports and encourages lateral coordination among units and offices. These documentary provisions demonstrate that coordination and reporting are not merely relational practices but are formally incorporated into operational arrangements.

The KII evidence, however, introduces an important qualification to this apparent strength. Key Informant 1 explained that coordination with local government units, military commanders, port operators, and community stakeholders often depends on relationships developed by experienced personnel over many years. When such personnel transfer, their successors may require time to rebuild these relationships and understand local operational arrangements. Thus, while responsibility for coordination is formally assigned,

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the relational knowledge that makes coordination effective may remain partly attached to particular individuals.

This distinction becomes important from an organizational-resilience perspective. Formal coordination arrangements create structural resilience, while professional relationships and experience create adaptive capacity. The PCG benefits from both, but continuity becomes vulnerable when the second is not captured institutionally. A successor may know that coordination is his or her responsibility without immediately knowing whom to contact, what informal coordination mechanisms work, what commitments already exist, or how particular partner relationships have historically been managed.

The fifth indicator, authority and triggers for plan activation are clearly defined (WM = 2.51, SD = 0.78), remained within the Manifested category but stood at its lower threshold. This suggests that respondents generally recognize the authority to initiate operational plans and continuity-related actions, although activation criteria may not be equally explicit across all circumstances.

The reviewed documents provide evidence of operational authority, tasking, reporting chains, implementation responsibilities, and mechanisms such as FRAGO for making necessary adjustments during execution. This demonstrates that the PCG possesses an operational culture in which plans are activated and modified through recognized command authority. However, the relatively lower quantitative rating suggests a developmental requirement specific to PSC: continuity activation should not depend solely on the activation of the larger emergency or operational response plan. A continuity system must also define the conditions under which mission-essential functions, alternate facilities, succession arrangements, emergency communications, vital-record procedures, resource contingencies, and other continuity mechanisms are activated.

This is theoretically consistent with Continuity Management, where responsibility is linked not merely to a position but to predetermined decision points and continuity requirements. The quantitative result therefore indicates that the PCG already has an operational activation architecture, but a future PSC arrangement should make explicit who may activate continuity measures, what conditions trigger activation, what level of continuity response is required, and when such measures may be escalated or terminated.

The pattern changes significantly in the two lowest-ranked indicators. Knowledge transfer from experienced personnel to successors (WM = 2.44, SD = 0.77; Rank 6) was only Slightly Manifested. This is the first clear break in an otherwise consistently Manifested dimension and exposes the principal weakness within Responsibilities. While the preceding indicators establish that the PCG can identify who takes over, this indicator questions whether the successor receives what is needed to take over effectively.

The KII evidence strongly explains this difference. After confirming the strength of command succession, Key Informant 1 immediately qualified it by stating that “Although authority transfers immediately, the knowledge required to perform those responsibilities is often not fully documented or systematically transferred.” The informant specifically identified relationships with local government units, military commanders, port operators, and community stakeholders as examples of knowledge and networks accumulated over time that may not automatically pass to a successor.

Key Informant 2 expressed the same distinction by emphasizing that “continuity involves much more than command succession.” Specialized functions remain dependent on institutional knowledge, technical expertise, and professional networks developed by experienced personnel. Key Informant 4 similarly observed that “While command succession is established, continuity of specialized institutional knowledge and critical functions still depends heavily on experienced personnel rather than standardized systems.” Key Informant 15 summarized the issue most directly: “Responsibilities are generally defined, but continuity depends too much on key individuals.”

These accounts explain why Responsibilities can legitimately rank first while knowledge transfer remains only Slightly Manifested. The organization has institutionalized the position more strongly than the knowledge attached to the position. Turnover briefings, mentoring, coaching, operational debriefings,

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and practical experience help compensate for this condition, demonstrating substantial human resilience and adaptive capacity. However, these mechanisms remain vulnerable to personnel rotation, retirement, prolonged absence, or simultaneous unavailability of several experienced personnel because much of the knowledge remains tacit and person-dependent.

The documentary evidence points in the same direction. IMPLAN 0426-002, Kapihan sa Pantalan directs D-1 to "ensure continuity and proper designation of representatives," demonstrating recognition of personnel continuity. However, across the reviewed plans, there is substantially less systematic evidence of continuity-specific succession for specialized functions, structured transfer of tacit knowledge, standardized turnover packages, controlled knowledge repositories, or mechanisms for transferring critical professional and stakeholder relationships. The documents are therefore much stronger in answering "Who is responsible?" than "What institutional knowledge must follow that responsibility when the person changes?"

Whitworth (2006) provides an important theoretical explanation for this distinction. Continuity requires not merely alternate personnel but mechanisms that allow essential functions to remain executable when normal personnel arrangements fail. Similarly, ISO 22301:2019 places roles and authority within a management system that requires them to be supported and maintained. Designating a successor is therefore necessary but insufficient. The successor must also possess the authority, competency, information, procedures, contacts, institutional memory, and practical knowledge required to perform the essential function without unacceptable degradation.

The lowest-rated indicator, role-specific checklists or job aids supporting performance during disruption (WM = 2.43, SD = 0.73; Rank 7), reinforces the knowledge-transfer problem from a different direction. If E6 concerns the transfer of accumulated knowledge from one person to another, this indicator concerns the extent to which essential knowledge has already been converted into institutional tools that do not depend on the continued presence of a particular individual.

The reviewed documents contain detailed assignments of responsibility and references to operational procedures, emergency procedures, contingency plans, unit SOPs, competency requirements, and staff duties. The CGDSWM Annual General Inspection LOI, for example, requires personnel familiarity with duties and responsibilities under the Watch Quarter and Station Bill, emergency procedures, contingency plans, and unit SOPs. These mechanisms provide an important procedural foundation. However, the documentary corpus offers less systematic evidence of continuity-specific, role-based job aids designed for use when normal personnel arrangements are disrupted.

This difference is consequential. A conventional job description or organizational tasking tells personnel what they are responsible for; a continuity job aid should enable an alternate to determine what must be done immediately, what decisions may be made, which systems and records are required, whom to contact, what minimum service level must be sustained, what deadlines apply, and how the function is transferred or restored. The Slightly Manifested rating therefore indicates that the PCG's responsibility architecture is not yet consistently translated into tools that make specialized responsibilities readily executable by alternate personnel during disruption.

Taken together, the seven indicators reveal a coherent internal hierarchy within the Responsibilities dimension. The PCG is strongest in orders of succession (2.62), delegation of authority (2.59), and clarity of roles and responsibilities (2.58). It remains comparatively strong in coordination and reporting responsibilities (2.53) and activation authority (2.51). The decline occurs when responsibility must be converted from an organizational assignment into a transferable capability: deliberate knowledge transfer falls to 2.44, while role-specific continuity job aids register 2.43.

This pattern produces a central distinction that cuts across the quantitative results, interviews, documents, literature, and theoretical interpretation: continuity of authority is more developed than continuity of capability. The PCG generally knows who assumes command, who is responsible, who reports to whom, who coordinates, and who performs assigned operational tasks. What remains less consistently

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institutionalized is ensuring that the knowledge, competencies, procedures, relationships, records, contacts, and practical experience required to perform those responsibilities transfer systematically to an alternate or successor.

The finding does not diminish the overall Manifested rating of Responsibilities. Rather, it explains the nature and limits of that strength. The PCG possesses a comparatively mature formal command-and-responsibility structure, supported by operational plans that assign tasks, establish accountability, prescribe reporting, and identify coordinating responsibilities. This institutional strength helps explain why PCG units continue functioning despite personnel movement and disruption. At the same time, the KIIs reveal that experienced personnel frequently bridge remaining institutional gaps through mentoring, professional relationships, practical judgment, turnover briefings, and adaptation. Human resilience therefore reinforces the formal structure, but it also masks the vulnerability created when continuity depends excessively on particular individuals.

The resulting meta-inference is therefore: The PCG has institutionalized continuity of authority more strongly than continuity of specialized capability. This meta-inference is particularly significant because it reframes the developmental requirement for Responsibilities. The PCG does not principally need to create an entirely new responsibility structure. Its existing chain of command, staff organization, accountability mechanisms, operational tasking, and coordination arrangements already provide a strong institutional foundation. The requirement is to extend that formal responsibility structure into a system of transferable continuity capability.

Accordingly, every mission-essential function should have a designated primary owner and prepared alternate, supported by documented delegations of authority, cross-trained personnel, role-specific continuity checklists, structured turnover packages, critical stakeholder and contact directories, and controlled repositories containing the technical, procedural, and institutional knowledge necessary to sustain the function. For highly specialized or person-dependent functions, succession should therefore be treated not simply as replacing the incumbent but as preserving the capability embodied in the function.

This integrated finding provides the empirical and theoretical basis for the "Assign" component of the proposed A3R2 Continuity Management Framework. Within the framework, Assign should not mean merely naming the office or individual responsible for an essential function. It should ensure that responsibility, authority, knowledge, competency, procedures, and alternate personnel are deliberately connected so that the function remains executable despite the absence of its normal owner.

The relationship among the first three components of A3R2 therefore becomes operationally coherent: Assess identifies what must continue; Assure determines and secures what is required for it to continue; and Assign determines who must make it continue and ensures that both the authority and capability to do so survive personnel disruption. In this manner, the strongest existing dimension of PCG Public Service Continuity becomes not merely a strength to preserve, but an institutional foundation upon which the remaining continuity requirements can be built.

Recovery

The Recovery dimension examined the extent to which existing Philippine Coast Guard crisis-planning arrangements provide predetermined mechanisms for sustaining and restoring mission-essential functions after disruption. Its six indicators assessed whether recovery priorities are predefined, minimum acceptable service levels are established, recovery sequences and responsible offices are documented, alternate arrangements permit essential functions to operate under degraded conditions, recovery arrangements are tested, and continuity operations are clearly distinguished from full reconstitution. Recovery obtained an overall weighted mean of 2.39 (SD = 0.67), interpreted as Slightly Manifested, and ranked fourth among the five Public Service Continuity dimensions. This indicates that recovery capability exists within the PCG, but the mechanisms needed to make recovery systematic, measurable, and repeatable are not yet uniformly institutionalized. The existing Chapter 4 analysis similarly found that recovery

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priorities, alternate arrangements, augmentation, and logistics are frequently determined during incidents, while formal documents are stronger in response phases than in predefined recovery objectives and function-specific playbooks.

At the item level, all six Recovery indicators were Slightly Manifested, although their relative ranking reveals important differences. The highest-rated indicators concerned the distinction between immediate continuity operations and full reconstitution and the documentation of recovery sequences and responsible offices, both with weighted means of 2.42. These were followed by testing of recovery arrangements (WM = 2.39), alternate arrangements for degraded operations (WM = 2.38), predefined recovery priorities (WM = 2.38), and minimum acceptable service levels (WM = 2.37). The pattern suggests that the PCG has a comparatively clearer understanding of operational sequencing and transition than of the specific service thresholds and predefined priorities that should govern organizational recovery.

The quantitative pattern therefore points to a central recovery issue: the PCG is able to recover operationally, but recovery remains more experience-driven than institutionally predesigned. Existing plans, experienced commanders, adaptive personnel, augmentation, resource sharing, and operational workarounds allow functions to be restored under pressure. However, these strengths are not yet consistently translated into predetermined recovery priorities, measurable service levels, standardized alternate arrangements, and regularly exercised recovery playbooks.

Table 12. *Level of Manifestation of Public Service Continuity in Terms of Recovery*

Recovery Indicator	Weighted Mean	SD	Rank	Interpretation
1. Recovery arrangements distinguish immediate continuity operations from full reconstitution.	**2.42**	0.72	1	Slightly Manifested
2. Recovery sequences and responsible offices are documented.	**2.42**	0.74	2	Slightly Manifested
3. Recovery arrangements are tested through exercises or drills.	**2.39**	0.79	3	Slightly Manifested
4. Alternate arrangements allow essential functions to operate at reduced levels while systems are restored.	**2.38**	0.76	4	Slightly Manifested
5. Recovery priorities among essential functions are predefined rather than improvised.	**2.38**	0.68	5	Slightly Manifested
6. Minimum acceptable service levels during disruption are specified.	**2.37**	0.66	6	Slightly Manifested
Overall Recovery	**2.39**	**0.67**	**4***	**Slightly Manifested**

The highest-rated indicator, recovery arrangements distinguish immediate continuity operations from full reconstitution (WM = 2.42, SD = 0.72; Rank 1), was nevertheless only Slightly Manifested. The result indicates that PCG personnel generally recognize that maintaining essential operations immediately after disruption is different from restoring the organization to full capability. However, the rating also suggests that this distinction is not yet consistently translated into formal recovery procedures.

The KII findings strongly explain this result. Key Informants 1 through 3 described existing plans as effective during the initial phase of emergencies because they provide command relationships, activation procedures, deployment arrangements, reporting, and coordination. As operations become prolonged, however, decisions affecting alternate facilities, personnel relief, communications, logistics, administrative support, and recovery increasingly depend on commander judgment and locally developed solutions. Key Informants 11 and 12 made the distinction particularly clear by separating effective crisis and contingency planning from the ability of the PCG itself to continue when headquarters, communications, or key personnel are disrupted. Key Informants 13 and 14 similarly observed that extensive preparation exists for

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lifesaving response but comparatively less preparation exists for sustaining the organization after the response phase.

The documentary analysis corroborates this interpretation. IMPLAN NR 002-2025, OPLAN BYAHENG AYOS: Synchronized National and Local Elections 2025, for example, clearly establishes the operational situation, mission, task organization, deployment, command relationships, and continuing performance of mandated duties during the election period. These features demonstrate mature incident-response planning. However, such operational phases do not automatically constitute an organizational recovery system because they do not consistently define when continuity operations end, when recovery formally begins, or when a mission-essential function has reached the conditions required for full reconstitution.

The finding therefore distinguishes operational transition from continuity recovery. Immediate response focuses on stabilizing the incident and sustaining urgent Coast Guard missions; recovery focuses on restoring the PCG's own affected functions to predetermined levels. This distinction is consistent with Continuity Management Theory, which treats recovery as a planned stage within a managed continuity cycle rather than simply an extension of emergency response. Thus, the highest-ranked Recovery indicator still reveals an institutional requirement: the PCG must formally define the transition from response, to continuity operations, to recovery, and ultimately to reconstitution.

The second-ranked indicator, recovery sequences and responsible offices are documented (WM = 2.42, SD = 0.74; Rank 2), likewise suggests that some elements of recovery sequencing and organizational responsibility are present, but not yet sufficiently standardized for continuity purposes. The result is consistent with the strength identified under Responsibilities, where formal command relationships and task assignments were already Manifested.

The KII evidence supports this interpretation. Informants consistently described the PCG as possessing clear operational command arrangements. Key Informants 8, 9, and 10 noted that operational procedures and command relationships are well established across different Coast Guard functions, yet recovery and restoration remain more dependent on leadership experience once disruption extends beyond the initial response period.

Documentary evidence similarly shows that PCG plans are generally effective in assigning offices and responsibilities. IMPLAN 0426-002, Kapihan sa Pantalan, for instance, contains a phased Concept of Operations, assigns implementation and monitoring responsibilities to Stations and District staff, and allows adjustments through FRAGO. It also specifies reporting, coordination, logistics, and communication responsibilities. These arrangements provide an important institutional foundation for recovery sequencing. However, they remain oriented toward the execution of the particular operation rather than toward restoring disrupted PCG mission-essential functions according to predefined recovery objectives.

The quantitative finding is therefore qualified rather than contradicted. The PCG knows how to organize people and offices for operations; what remains less developed is a function-specific recovery sequence that determines which disrupted essential function is restored first, by whom, using what resources, and within what target period. Recovery sequencing must consequently be linked to the mission-essential functions identified under Assess, the resources secured under Assure, and the owners designated under Assign.

The third-ranked indicator, recovery arrangements are tested through exercises or drills (WM = 2.39, SD = 0.79; Rank 3), indicates that testing occurs but remains uneven. Its relatively high SD also suggests variation across commands and units in the extent to which personnel experience or participate in exercises that test recovery arrangements.

The KII narratives explain why this indicator remains Slightly Manifested despite the PCG's strong operational culture. Operational incidents themselves provide extensive practical learning, and personnel routinely adapt under actual emergency conditions. Yet practical exposure to operations is not equivalent to deliberately testing continuity recovery. Key Informants 4 and 5 emphasized that although operational

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response capability is strong, organizational recovery, doctrine, and knowledge-management mechanisms remain less developed. Unless experience is converted into doctrine, exercises, training, and institutional procedures, each disruption may require units to recreate solutions already discovered elsewhere.

The documentary evidence illustrates both the strength and the gap. LOI Nr. 0726-001 on the Annual General Inspection requires units to maintain readiness of personnel, facilities, records, equipment, mobility assets, communications systems, and operational capabilities. It also requires readiness for Fire Drill, Earthquake Drill, Bomb Threat Drill, Medical Emergency Response, General Quarters, and similar scenarios. These requirements clearly show an existing exercise and readiness culture. However, the exercises focus primarily on emergency preparedness and response rather than testing whether specific mission-essential functions can continue at minimum service levels and recover within predetermined targets when normal systems are unavailable.

The implication is that the PCG does not need to create an entirely new exercise culture. Instead, existing training, drills, AGIs, and operational exercises can be expanded to include continuity-specific recovery objectives. Exercises should test whether alternate personnel can assume responsibility, alternate facilities are usable, communications failover works, essential records remain accessible, minimum services can be maintained, and functions can be restored within specified recovery targets.

The fourth-ranked indicator, alternate arrangements allow essential functions to operate at reduced levels while systems are restored (WM = 2.38, SD = 0.76; Rank 4), demonstrates another important continuity gap. PCG personnel appear capable of developing workarounds and alternate arrangements, but the Slightly Manifested result indicates that these alternatives are not yet uniformly predetermined and institutionalized.

The KII narratives strongly corroborate this finding. Key Informant 3 described actual conditions in which damaged facilities, communication interruptions, transportation constraints, and personnel shortages required solutions to be developed during the incident rather than activated from predetermined continuity procedures. More broadly, the KII corpus shows that as disruption becomes prolonged, alternate facilities, staffing arrangements, logistics, communications, and administrative support increasingly depend on experience, local adaptation, and resource sharing.

This pattern is reinforced by the Resource dimension, where alternate operating facilities, communications failover, records protection, and long-duration logistics were also found to be uneven. The integrated evidence therefore demonstrates the direct relationship between Assure and Recover: alternate arrangements cannot be activated during recovery unless the people, sites, communications, information, logistics, and support systems were assured before the disruption.

The documentary evidence provides examples of operational flexibility. IMPLAN 0426-002, Kapihan sa Pantalan, allows rotating venues among participating agencies and permits adjustments through FRAGO, demonstrating practical adaptability. However, such flexibility should not automatically be treated as a continuity alternate arrangement because the document does not establish an alternate facility specifically configured and tested for sustaining mission-essential PCG functions when primary systems fail.

From a continuity-management perspective, successful workarounds should therefore be institutionalized into trigger-based recovery playbooks. For each essential function, the PCG should predetermine what alternate process, location, communication method, staffing arrangement, information source, or logistics support will be used when normal capability is degraded. The purpose is not to eliminate improvisation but to reduce the number of basic continuity decisions that must be invented under crisis conditions.

The fifth-ranked indicator, recovery priorities among essential functions are predefined rather than improvised (WM = 2.38, SD = 0.68; Rank 5), directly captures one of the principal gaps identified by the qualitative and documentary strands. The result indicates that PCG personnel can establish priorities

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effectively during operations, but these priorities are not yet consistently predetermined according to the criticality of individual mission-essential functions.

The KII findings are especially clear on this point. Across the interviews, recovery priorities, personnel augmentation, alternate arrangements, and logistics were frequently described as decisions taken during the incident itself. Key Informants 13 and 14 further explained that when operations extend for several days, services are sustained largely through experience and improvisation. This demonstrates strong operational resilience but also means that priority-setting remains partly dependent on the commanders and experienced personnel available at the time.

The documentary analysis reaches the same conclusion. Existing PCG plans contain operational priorities, phases, deployments, command relationships, and tasking, but they provide less consistent evidence of predefined recovery priorities for the PCG's own mission-essential functions. The distinction is fundamental. A plan may prioritize maritime security, search and rescue, election support, or another mission during an external emergency without identifying which internal PCG function – command and control, communications, logistics, administrative support, information systems, or another essential function – must be restored first if the organization itself is disrupted.

Continuity Management Theory requires recovery priorities to be linked to the criticality and tolerable downtime established during Assess. Recovery therefore should not begin by asking commanders what should be restored first after disruption has already occurred. That decision should substantially have been made beforehand through the identification of mission-essential functions, maximum tolerable downtime, critical dependencies, and recovery targets. Operational judgment then adapts those predetermined priorities to actual circumstances.

The lowest-rated Recovery indicator, minimum acceptable service levels during disruption are specified (WM = 2.37, SD = 0.66; Rank 6), represents the clearest quantitative gap in the dimension. The finding indicates that although PCG units continue operating under degraded conditions, the minimum level of service that must be sustained is not consistently formalized.

This result closely connects Recovery to Risk Assessment. The Risk Assessment findings already showed that acceptable minimum service levels and maximum tolerable downtime were among the weaker continuity practices. Recovery consequently inherits that weakness: if the minimum acceptable service level has not been established during Assess, commanders have no predefined benchmark for determining whether an essential function is being adequately sustained during Recover.

The KII narratives strongly support this interpretation. Informants consistently described continuing operations through local adjustment, resource sharing, reduced staffing, workarounds, and leadership judgment. The broader KII synthesis concluded that formal systems for acceptable service levels, alternate arrangements, and recovery priorities remain less developed even though personnel are able to maintain activities through adaptation.

The documentary evidence likewise shows more explicit operational tasking than predefined degraded-service standards. The document-coding methodology itself distinguishes a genuine continuity requirement from generic language such as “sustainment,” “readiness,” or “recovery”: evidence of Recovery requires explicit organizational recovery objectives, minimum service levels, recovery ownership, or reconstitution rather than merely operational response language. This methodological distinction reinforces the quantitative finding.

Minimum service levels are essential because continuity does not always mean maintaining full normal capability. Under major disruption, some functions may operate at reduced output. The institutional requirement is therefore to define how low a mission-essential function can go before public-service continuity becomes unacceptable. These standards provide the measurable basis for determining staffing, resource priorities, alternate arrangements, and recovery targets.

Taken together, the six quantitative indicators reveal a consistent Recovery pattern. The PCG is relatively stronger in recognizing the distinction between continuity operations and full reconstitution and

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in documenting operational sequences and responsible offices. The ratings decline when Recovery requires more formal continuity mechanisms such as tested arrangements, predetermined alternates, predefined function priorities, and measurable minimum service levels. Importantly, all six indicators remain Slightly Manifested, showing that no single recovery mechanism has yet reached the level of consistent institutionalization.

The KII findings explain this quantitative pattern: experienced commanders and personnel can restore operations under pressure, but recovery becomes increasingly dependent on judgment, improvisation, local adaptation, augmentation, and inter-unit support as disruption becomes prolonged. The documentary findings corroborate this explanation because existing plans establish strong response phases, task organizations, operational responsibilities, coordination, and readiness arrangements, while showing less consistent evidence of function-specific recovery objectives, minimum service thresholds, alternate recovery procedures, and tested continuity playbooks. The Strength–Gap Matrix consequently identifies Recovery's established strength as the ability of experienced commanders to restore operations and its principal gap as the absence of consistently predefined priorities, service levels, recovery targets, alternate procedures, and continuity exercises.

The resulting meta-inference is therefore that the PCG possesses demonstrated operational recovery capability, but recovery is more strongly institutionalized as an adaptive operational practice than as a predefined continuity-management system. Recovery succeeds because commanders, personnel, units, and partners find ways to restore capability; however, the organization has not yet consistently converted those successful practices into function-specific, trigger-based, measurable, and exercised recovery arrangements.

The institutional requirement is therefore to move recovery decisions upstream – before disruption occurs. Every mission-essential function should have a recovery playbook that defines its activation trigger, minimum service level, priority and sequence, responsible owner and alternate, recovery target, staffing and logistics requirements, communications and information needs, alternate operating arrangement, critical external dependencies, reporting requirements, and exercise schedule. Recovery should consequently be planned before degradation rather than invented after it occurs.

This integrated finding provides the empirical foundation for the Recover component of the Author's A3R2 Continuity Management Framework. Within A3R2, Assess establishes what must continue, its dependencies, acceptable degradation, and recovery target; Assure secures the people, facilities, systems, information, logistics, finance, and mutual support necessary for continuity; Assign determines ownership, succession, delegated authority, and knowledge continuity; and Recover activates the predetermined arrangements necessary to sustain minimum essential service and restore priority functions within established targets. The framework therefore defines Recover through the central question: How will minimum essential service be sustained or restored within priority targets? Its required mechanism is a tested recovery playbook for every mission-essential function.

Accordingly, Recover is the stage of A3R2 where predetermined continuity capability is converted into operational action. Its purpose is not merely to resume activity, but to ensure that the right essential functions are sustained or restored first, at the right minimum level, within the required period, by designated personnel, using tested alternate arrangements. Once those functions are stabilized, the cycle proceeds to Restore, where full reconstitution is verified, lessons are institutionalized, corrective actions are closed, and improved capability is fed back into the next Assess cycle. In this manner, A3R2 converts PCG recovery from predominantly experience-driven operational resilience into a repeatable and institutionally managed continuity capability.

Restoration of Normalcy

The Restoration of Normalcy dimension obtained an overall weighted mean of 2.42 (SD = 0.72), interpreted as Slightly Manifested, and ranked third among the five Public Service Continuity (PSC)

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dimensions. All six indicators were likewise Slightly Manifested, ranging from 2.35 to 2.49. This pattern indicates that the Philippine Coast Guard (PCG) is able to return from disruption to routine operations, but the mechanisms that should transform operational restoration into verified reconstitution, organizational learning, corrective action, and continuous improvement remain unevenly institutionalized. The result therefore does not signify an inability to restore operations. Rather, it points to a distinction between returning to operations and institutionalizing restoration as a complete continuity-management process.

Table 13. *Level of Manifestation of Public Service Continuity in Terms of Restoration of Normalcy*

Restoration of Normalcy Indicator	Weighted Mean	SD	Rank	Interpretation
E5. Lessons learned are incorporated into updated plans, training, and procedures.	2.49	0.85	1	Slightly Manifested
E1. A deliberate process guides the transition from continuity operations back to normal functioning.	2.45	0.71	2	Slightly Manifested
E4. Corrective actions from after-action reviews are assigned, tracked, and completed.	2.43	0.79	3	Slightly Manifested
E3. After-action reviews are conducted following disruptions or exercises.	2.41	0.80	4	Slightly Manifested
E2. Damage assessment and validation of restored systems are conducted before full resumption.	2.36	0.76	5	Slightly Manifested
E6. Continuity arrangements are periodically reviewed and improved rather than treated as one-time documents.	2.35	0.81	6	Slightly Manifested
Overall Restoration of Normalcy	**2.42**	**0.72**	**3***	**Slightly Manifested**

Note. N = 306. Item SDs describe the dispersion of responses for each indicator. The overall SD represents the dispersion of respondents' Restoration of Normalcy dimension means. Rank 3 refers to the position of Restoration of Normalcy among the five PSC dimensions.

The highest-rated indicator was E5, incorporation of lessons learned into updated plans, training, and procedures (WM = 2.49, SD = 0.85; Rank 1). Its position immediately below the Manifested threshold suggests that learning from operational experience is recognizable within the PCG, although the relatively high dispersion indicates that this practice is not experienced uniformly across units. This finding is reinforced by the documentary evidence. IMPLAN 0426-002, Kapihan sa Pantalan: Inter Agency Maritime and Port Information Sharing Mechanism in Sulu, for example, requires insights generated by the activity to be integrated into formal planning, operations, and policy recommendations and provides for periodic assessment of the mechanism's effectiveness and adaptability. D-3 is likewise tasked to oversee the integration of Kapihan outputs into operational planning. The document demonstrates that feedback from operational experience can formally influence succeeding plans and activities.

The interviews, however, explain why E5 remained at 2.49 rather than crossing into the Manifested range. Key Informant 1 acknowledged that After Operations Reports and operational debriefings are conducted after major incidents but observed that “the process is not yet standardized from a continuity management perspective.” The informant further explained that lessons frequently concentrate on operational response, while continuity concerns such as sustained essential services, alternate arrangements, succession effectiveness, and organizational resilience receive less systematic attention. Key Informant 15 similarly stated, “We usually return to operations quickly, but we are less consistent in evaluating what happened, capturing lessons learned, and strengthening continuity before the next crisis occurs.” Thus, the survey, interviews, and documentary evidence collectively suggest that organizational learning exists, but its conversion into an organization-wide continuity practice remains incomplete.

This distinction is significant when viewed through Continuity Management Theory. Continuity is not completed when lessons are merely identified or recorded; lessons must feed back into plans, procedures, training, resources, and subsequent exercises. The Plan-Do-Check-Act logic underlying

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continuity management requires arrangements to be evaluated, corrected, improved, and retested. From this perspective, the relatively high rating of E5 reflects an important institutional foundation, while its Slightly Manifested interpretation indicates that the feedback loop has not yet become sufficiently systematic to constitute a mature continuous-improvement mechanism.

The second-ranked indicator, E1, a deliberate process guiding the transition from continuity operations back to normal functioning (WM = 2.45, SD = 0.71), reinforces the same pattern. PCG units evidently recognize the transition from extraordinary operations to normal organizational functioning, but the result suggests that the transition is not consistently governed by standardized reconstitution criteria. Key Informant 1 described how units, once emergency operations stabilize, restore administrative services, replenish logistics, repair facilities, normalize personnel deployment, and resume routine operations. This explains why restoration is Slightly Manifested rather than Not Manifested: an identifiable restoration process clearly occurs.

At the same time, documentary evidence shows that formal provisions often emphasize termination and return to routine status more strongly than continuity-specific reconstitution. Letter of Instructions Nr. 0126-002, 1st CGDSWM Command Conference for C.Y. 2026, for example, provides under Phase III for participants to disengage and return to their proper stations. Such a provision appropriately terminates the activity, but it also illustrates the distinction revealed by the survey: returning personnel or units to their normal status does not necessarily demonstrate that essential functions, supporting systems, records, communications, facilities, and other continuity capabilities have been formally validated before normalization.

This is where the Continuity of Operations theoretical lens sharpens the interpretation. Reconstitution is not simply the cessation of emergency operations. It requires a deliberate determination that the organization is capable of returning to stable institutional functioning. Accordingly, the E1 result indicates that the PCG possesses the operational capacity to transition back to routine activities, but its restoration system would be strengthened by explicit criteria determining when continuity operations may terminate, what must first be restored, who validates restoration, and what conditions constitute an acceptable return to normal operations.

The third-ranked indicator, E4, corrective actions from after-action reviews are assigned, tracked, and completed (WM = 2.43, SD = 0.79), further exposes the difference between having a reporting mechanism and operating a closed corrective-action cycle. The quantitative finding suggests that corrective actions occur, but assignment of responsibility, deadline monitoring, completion verification, and formal closure are not consistently evident. Key Informant 2 reinforced this interpretation by noting that operational debriefings and After Operations Reports are routinely undertaken, yet their emphasis remains primarily on operational performance rather than comprehensive continuity capability. The issue, therefore, is not simply whether deficiencies are discovered, but whether identified deficiencies subsequently acquire named owners, deadlines, monitoring mechanisms, verification, and institutional closure.

Importantly, the documentary evidence demonstrates that such a system is not foreign to the PCG. Letter of Instruction Nr. 0726-001, CGDSWM Annual General Inspection, contains a specific Phase IV – Post-Inspection and Corrective Action, requiring consolidation of findings and recommendations, implementation of corrective actions for identified deficiencies, monitoring of compliance, and preparation of post-inspection reports. D-3 is specifically tasked to monitor implementation and recommend corrective measures when necessary. This document therefore provides an important qualification to the relatively low survey result: the PCG already possesses institutional examples of closed-loop corrective-action management. The gap lies in the absence of evidence that the same discipline is consistently required as part of PSC restoration following major disruptions.

The theoretical implication is important. Continuity Management does not require the PCG to invent an entirely new administrative mechanism. Rather, existing inspection and corrective-action practices can be adapted and standardized for continuity purposes. In this sense, the quantitative weakness

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identified under E4 represents less a complete capability absence than an institutionalization gap: the mechanism exists in selected organizational processes but has not yet been consistently translated into an organization-wide continuity requirement.

The fourth indicator, E3, after-action reviews following disruptions or exercises (WM = 2.41, SD = 0.80), presents a similar relationship between existing practice and incomplete institutionalization. IMPLAN NR 002-2025, OPLAN BYAHENG AYOS: Synchronized National and Local Elections 2025 requires the consolidation of Post-OPLAN Reports from Stations and the preparation of an After Activity Report for command approval and subsequent submission. Stations and Sub-Stations are likewise required to submit post-operation reports for consolidation. These provisions confirm the existence of a PCG post-operation reporting culture and explain why after-action review is already visible in practice.

Yet the Slightly Manifested result indicates that reporting by itself does not complete the restoration cycle. As Key Informant 4 observed, "Restoration activities usually emphasize resuming operations, but organizational learning and long-term institutional recovery are less developed." Thus, the survey finding is not contradicted by the existence of Post-OPLAN Reports and After Activity Reports. Instead, the documentary and qualitative findings clarify what the numerical result represents: reports are generated, but the continuity-specific mechanisms connecting those reports to corrective-action assignment, institutional learning, plan revision, and subsequent testing are not uniformly established.

The fifth-ranked indicator, E2, damage assessment and validation of restored systems before full resumption (WM = 2.36, SD = 0.76), reveals a deeper reconstitution concern. The result suggests that facilities, systems, communications, personnel arrangements, logistics, and operational capabilities may be restored without consistently passing through a standardized validation protocol before full normalization is declared. The issue is therefore not necessarily whether restoration occurs, but whether restoration is formally verified against predetermined continuity criteria.

The CGDSWM Annual General Inspection LOI again provides a useful institutional precedent because it includes validation activities and readiness checks associated with identified deficiencies and corrective actions. However, the broader documentary pattern does not establish that equivalent validation requirements are uniformly incorporated into operational plans as part of post-disruption reconstitution. Under the Continuity of Operations lens, this distinction is critical: operational availability is not automatically equivalent to verified continuity capability. A system may be functioning, for example, without confirmation that it has recovered to the level required to sustain mission-essential functions under normal or renewed disruptive conditions.

The lowest-rated indicator, E6, periodic review and improvement of continuity arrangements rather than treating them as one-time documents (WM = 2.35, SD = 0.81; Rank 6), identifies the most consequential weakness within the Restoration of Normalcy dimension. This finding suggests that the central challenge is not the PCG's capacity to return to normal operations, but its ability to maintain continuity arrangements as a living management system that is periodically reviewed, revised, exercised, corrected, and improved.

Key Informant 12 captured this weakness directly: "Once operations stabilize, organizational learning ends." The observation suggests that rapid normalization, although operationally desirable, can prematurely close the institutional learning process. This finding is consistent with the broader organizational-resilience perspective. PCG personnel and commanders demonstrate adaptive capacity by rapidly shifting resources, restoring activities, and moving to the next operational requirement. Such adaptability is an organizational strength; however, without a formal learning mechanism, the same mission orientation may leave insufficient institutional space for systematic reflection, corrective-action closure, and revision of continuity arrangements.

The documentary evidence both reinforces and qualifies this result. Kapihan sa Pantalan requires periodic assessment of its information-sharing mechanism and the integration of insights into succeeding planning, demonstrating that recurring improvement already exists in selected PCG arrangements.

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Likewise, the Annual General Inspection LOI establishes corrective-action and monitoring mechanisms. These documents demonstrate that periodic review and institutional feedback are achievable within the existing PCG management environment. Their significance lies precisely in their limited scope: they represent institutional precedents that can be expanded into PSC-wide practice, rather than evidence that such a practice is already uniformly embedded throughout the organization.

Taken together, the six indicators reveal a consistent progression. The PCG is comparatively stronger at learning from individual operational experiences (E5 = 2.49) and returning to normal functioning (E1 = 2.45) than at closing corrective actions (E4 = 2.43), institutionalizing after-action review as a continuity process (E3 = 2.41), validating restored systems (E2 = 2.36), and periodically reviewing continuity arrangements (E6 = 2.35). This progression explains the overall dimensional mean of 2.42. It portrays an organization whose operational restoration capability is already functioning but whose institutional restoration architecture remains developmental.

This interpretation is further reinforced by the response distribution. Only about 45.4 percent of all Restoration of Normalcy responses fell within the upper two response categories (3 or 4), while even the highest-rated indicator, E5, obtained upper-category responses from only about 50.3 percent of respondents. The dispersion therefore suggests that existing restoration practices are not absent but are unevenly experienced across the organization, consistent with the interviews and the varying levels of formalization found in the reviewed PCG documents.

The convergence of the evidence leads to an important meta-inference: the PCG is more mature in restoring operations than in institutionalizing restoration as a closed-loop process of reconstitution, verification, learning, corrective action, and continuous improvement. The survey establishes the magnitude and ordering of this condition; the KIIs explain why it occurs; the reviewed plans demonstrate both the existing institutional foundations and their uneven application; and Continuity of Operations and Continuity Management Theory explain why operational resumption alone is insufficient to constitute full restoration.

The identified gap, therefore, should not be framed as an inability of the PCG to return to normal operations. Rather, it is the absence of a consistently applied institutional mechanism capable of determining after every significant disruption: whether capability has actually been restored; whether temporary continuity arrangements can safely be terminated; what organizational lessons were identified; who owns the required corrective actions; whether those actions were completed and verified; and whether the resulting lessons have been incorporated into plans, doctrine, training, exercises, inspections, and resource decisions.

Accordingly, the evidence supports the institutionalization of a Continuity Restoration Protocol that establishes transition and reconstitution criteria; validates restored personnel, facilities, communications, records, logistics, systems, and essential services; formally closes or transfers temporary continuity arrangements; requires continuity-focused After Action Reviews; assigns corrective actions to named owners with deadlines; tracks implementation and evidence of closure; updates affected plans, doctrine, training, inspections, and resource requirements; and retests significant corrective measures.

This synergized finding provides the empirical and theoretical basis for the final “Restore” component of the A3R2 Continuity Management Framework. Restore should therefore not be understood simply as a return to the pre-disruption condition. Its institutional purpose is to ensure that the PCG returns to a verified and improved normal. Lessons and corrective actions generated during restoration must subsequently feed into the next Assess cycle. In this manner, Assess–Assure–Assign–Recover–Restore functions not as a linear emergency-response sequence, but as a recurring continuity-management cycle in which every disruption becomes both an operational challenge and an institutional opportunity to strengthen the PCG's capacity to continue its mission.

Summary of the Quantitative 5R Results

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Taken together, the five dimensions present a coherent picture of the Philippine Coast Guard's current Public Service Continuity posture. The overall weighted mean of 2.44 (SD = 0.62), interpreted as Slightly Manifested, indicates that continuity practices are already present within the organization but are not yet uniformly institutionalized as an integrated management system. More importantly, the dimensional pattern reveals where the PCG is comparatively strong and where continuity capability begins to weaken.

Responsibilities emerged as the strongest dimension (WM = 2.53, SD = 0.72; Rank 1 – Manifested), followed closely by Risk Assessment (WM = 2.52, SD = 0.61; Rank 2 – Manifested). These results indicate that the PCG already possesses a comparatively strong institutional foundation in command authority, assignment of responsibilities, succession, hazard awareness, vulnerability assessment, and recognition of operational dependencies. However, the integrated evidence qualifies both strengths. Responsibilities is stronger in continuity of authority than continuity of specialized capability, while Risk Assessment is stronger in operational risk awareness than formal continuity-impact analysis.

The pattern changes in the remaining three dimensions. Restoration of Normalcy ranked third (WM = 2.42, SD = 0.72 – Slightly Manifested), indicating that the organization is generally capable of returning to operations but is less consistent in institutionalizing reconstitution, validation, lessons learned, corrective-action closure, and continuous improvement. Recovery ranked fourth (WM = 2.39, SD = 0.67 – Slightly Manifested), reflecting the continuing dependence on operational judgment and incident-based decisions rather than predefined function-specific recovery priorities, procedures, and targets. Resources obtained the lowest rating (WM = 2.33, SD = 0.64; Rank 5 – Slightly Manifested), identifying the most immediate structural weakness in continuity: operational resources are available and can be mobilized, but the redundancy, accessibility, alternatives, reserves, and endurance required for prolonged continuity are not yet consistently assured.

The quantitative pattern therefore reveals an important institutional progression. The PCG is comparatively strongest in knowing the risk and knowing who is responsible, but becomes progressively less institutionalized in assuring what those functions require, recovering them within predefined parameters, and restoring the organization through a verified continuous-improvement cycle. This distinction explains why the organization can demonstrate substantial operational resilience despite an overall PSC rating of only Slightly Manifested. Existing command structures, experienced personnel, operational planning, improvisation, resource sharing, and interagency coordination enable the PCG to continue functioning, but these strengths are not yet fully converted into standardized continuity mechanisms.

When integrated with the KII narratives and documentary findings, the quantitative results reveal no fundamental contradiction among the evidence strands. Rather, the qualitative and documentary evidence primarily corroborate, qualify, and complement the numerical results. The KIIs explain how operational experience, adaptive leadership, inter-unit cooperation, and professional relationships compensate for institutional gaps, while the documentary evidence shows that many of the building blocks of continuity already exist in PCG plans – such as formal tasking, command relationships, resource mobilization, reporting, coordination, corrective action, and operational risk assessment – but are not yet systematically connected through a unified continuity framework.

The overall meta-inference is therefore that the PCG possesses substantial operational resilience but remains institutionally developmental in Public Service Continuity. Its existing strengths lie principally in operational risk awareness and formal responsibility structures, while its principal gaps lie in continuity-specific resource assurance, predefined recovery arrangements, specialized capability transfer, measurable service and recovery thresholds, and closed-loop restoration and continuous improvement.

Accordingly, the empirical findings do not support replacing existing PCG crisis-planning mechanisms. Rather, they support institutionalizing and connecting existing strengths through a formal Public Service Continuity system. The five dimensions collectively establish the empirical logic for the proposed A3R2 Continuity Management Framework: Assess–Assure–Assign–Recover–Restore. Assess

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extends operational risk awareness into continuity-impact analysis; Assure transforms resource availability into resource assurance; Assign extends responsibility into transferable capability; Recover converts reactive recovery decisions into predefined restoration of essential functions; and Restore institutionalizes reconstitution, organizational learning, corrective action, and continuous improvement.

Table 14. *Summary of the Quantitative 5R Results*

5R Dimension	Weighted Mean	SD	Rank	Interpretation	Key Quantitative Meaning	Principal Continuity Gap Identified
Responsibilities	2.53	0.72	1	Manifested	Strongest dimension. The PCG demonstrates comparatively established command authority, assignment of responsibilities, succession, reporting, and coordination arrangements.	Continuity of authority is stronger than continuity of specialized capability; knowledge transfer, cross-training, and alternate role coverage remain less developed.
Risk Assessment	2.52	0.61	2	Manifested	Hazard awareness, vulnerability assessment, and recognition of operational dependencies are comparatively well developed.	Operational risk assessment is stronger than formal continuity-impact analysis, particularly in defining mission-essential functions, minimum service levels, tolerable downtime, and recovery targets.
Restoration of Normalcy	2.42	0.72	3	Slightly Manifested	The PCG demonstrates the ability to return operations toward normal conditions following disruption.	Formal reconstitution, validation of restored capability, organizational learning, corrective-action closure, and systematic retesting are not yet consistently institutionalized.
Recovery	2.39	0.67	4	Slightly Manifested	Recovery capability is present, but remains comparatively dependent on operational experience, commander judgment, adaptation, and incident-time decisions.	Predefined recovery priorities, minimum service levels, recovery targets, alternate arrangements, function-specific recovery playbooks, and continuity exercises require further institutionalization.
Resources	2.33	0.64	5	Slightly Manifested	Lowest-rated dimension. Resources can be mobilized operationally, but their availability does not consistently	Redundancy, alternate facilities, backup communications, vital-record protection, logistics reserves, alternate staffing, emergency financing, and

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5R Dimension	Weighted Mean	SD	Rank	Interpretation	Key Quantitative Meaning	Principal Continuity Gap Identified
					constitute assured continuity capability during prolonged disruption.	continuity-specific mutual support remain uneven.
Overall Public Service Continuity	2.44	0.62	—	Slightly Manifested	Continuity practices are present across the PCG, but are not yet uniformly institutionalized as an integrated organization-wide system.	Existing operational strengths require greater standardization and integration to establish a sustained and institutionalized Public Service Continuity capability.

PCG leaders and key personnel description on the implementation of Public Service Continuity within existing crisis planning and actual operational practice

The 15 Key Informant Interviews described PSC as a capability that already exists in practice but is more strongly embedded in operational behavior than in a distinct continuity management system. Across the interviews, informants consistently distinguished the PCG's strong ability to respond to emergencies from its less formalized ability to sustain its own essential functions when personnel, facilities, communications, logistics, information, or command support are themselves disrupted. Their accounts collectively trace a progression from strong immediate response, through experience-driven adaptation during prolonged operations, toward the recognized need for formal continuity governance, recovery arrangements, and restoration mechanisms.

The collective KII evidence presents a consistent pattern. Existing crisis plans clearly organize command relationships, activation, deployment, reporting, communications, and interagency coordination. These arrangements work most effectively during the initial response. As disruption becomes prolonged, however, decisions concerning alternate facilities, personnel relief, continuity of administrative and technical support, safeguarding records, sustaining communications, recovery priorities, and restoration increasingly depend on experience, local adaptation, resource sharing, and commander judgment. PSC is therefore being implemented, but much of it remains implicit within operational practice rather than explicit within a dedicated institutional continuity system.

The story begins with Key Informant 1, who described existing plans as useful for command, activation, deployment, reporting, and coordination but explained that continuity decisions affecting the Coast Guard itself frequently depend on leadership judgment when operations become prolonged. Key Informant 2 closely corroborated this account, emphasizing that Crisis Action Plans are effective response documents yet do not comprehensively address how the organization sustains command facilities, information systems, administrative services, or prolonged staffing under degraded conditions. Key Informant 3 carried the same narrative into another operating environment: formal plans remained effective during the initial phase, but damaged facilities, communication interruptions, transportation constraints, and personnel shortages required solutions developed during the incident rather than activated from predetermined continuity procedures.

Key Informants 4 and 5 shifted the narrative from field execution to institutional learning. Both described strong operational response capability but less-developed organizational recovery, restoration, doctrine, and knowledge-management arrangements. Their accounts complemented the first three informants by showing that the problem is not only what happens during an incident, but what happens to the experience afterward: unless practical lessons are captured through doctrine, training, education, and

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knowledge systems, each new disruption risks requiring the organization to rediscover solutions already learned elsewhere.

Key Informant 6 added the problem of sustaining specialized capability. The informant described operational contingency arrangements as established, but prolonged operations place pressure on specialized personnel, equipment, maintenance, logistics, and support systems that are not always covered by institutional continuity procedures. Key Informant 7 presented a parallel account in another specialized mission area, again distinguishing strong incident-response arrangements from the broader need to sustain command, coordination, personnel, logistics, and organizational capability throughout disruption and recovery.

Key Informants 8, 9, and 10 continued the same story across other Coast Guard functions. Each described plans that clearly establish operational procedures and command relationships, while recovery and restoration remain more dependent on leadership experience. Their convergence is important because it demonstrates that the response-continuity distinction is not confined to one district or one functional command. Across multiple missions, the initial response is more formalized than the institutional arrangements that sustain the organization once the emergency extends beyond the period anticipated by the plan.

Key Informant 11 made the distinction explicit: the PCG has become highly capable at preparing crisis and contingency plans, but spends less effort ensuring that the organization itself can continue when its own headquarters, communications, or key personnel are disrupted. Key Informant 12 corroborated this from the planning perspective, observing that continuity planning remains overshadowed by operational concerns and that a Crisis Action Plan should not be equated with organizational continuity. Together, these two accounts transformed the earlier operational observations into an institutional diagnosis: the organization plans extensively for the crisis outside the institution, but less comprehensively for the crisis inside the institution.

Key Informants 13 and 14 then illustrated the consequence during prolonged disaster operations. Both described extensive preparation for lifesaving response but comparatively less preparation for sustaining the organization after the response phase. Once operations extend for several days, personnel sustain services through experience and improvisation. Finally, Key Informant 15 broadened the narrative by explaining that effective response is only one part of resilience. Continuity requires command, personnel, logistics, communications, intelligence, and operations to remain functional throughout disruption and recovery. The fifteenth account therefore closes the story by connecting all the preceding experiences into one conclusion: responding well does not automatically mean that the institution is fully continuity-ready.

Reading the aforementioned discussions as a connected narrative, Key Informants 1 through 3 establish the strength of immediate operational response; Key Informants 4 and 5 expose the institutional-learning requirement; Key Informants 6 and 7 demonstrate the vulnerability of specialized capability; Key Informants 8 through 10 show that the response-continuity imbalance recurs across core missions; Key Informants 11 and 12 explicitly separate incident management from organizational continuity; Key Informants 13 and 14 demonstrate what happens as operations become prolonged; and Key Informant 15 synthesizes continuity as the sustained functioning of the whole organizational system. Their differences are therefore complementary rather than contradictory. Each informant observed a different point in the same continuity process.

The collective meaning is that PSC already exists in the PCG as practice, but not yet to the same degree as an institutionalized management system. Personnel continue essential activities, commanders improvise alternatives, units share resources, and external partners extend capability. These practices demonstrate resilience. What remains less developed is the formal system that predetermines essential functions, acceptable service levels, alternate arrangements, specialized succession, recovery priorities, restoration criteria, and organizational learning.

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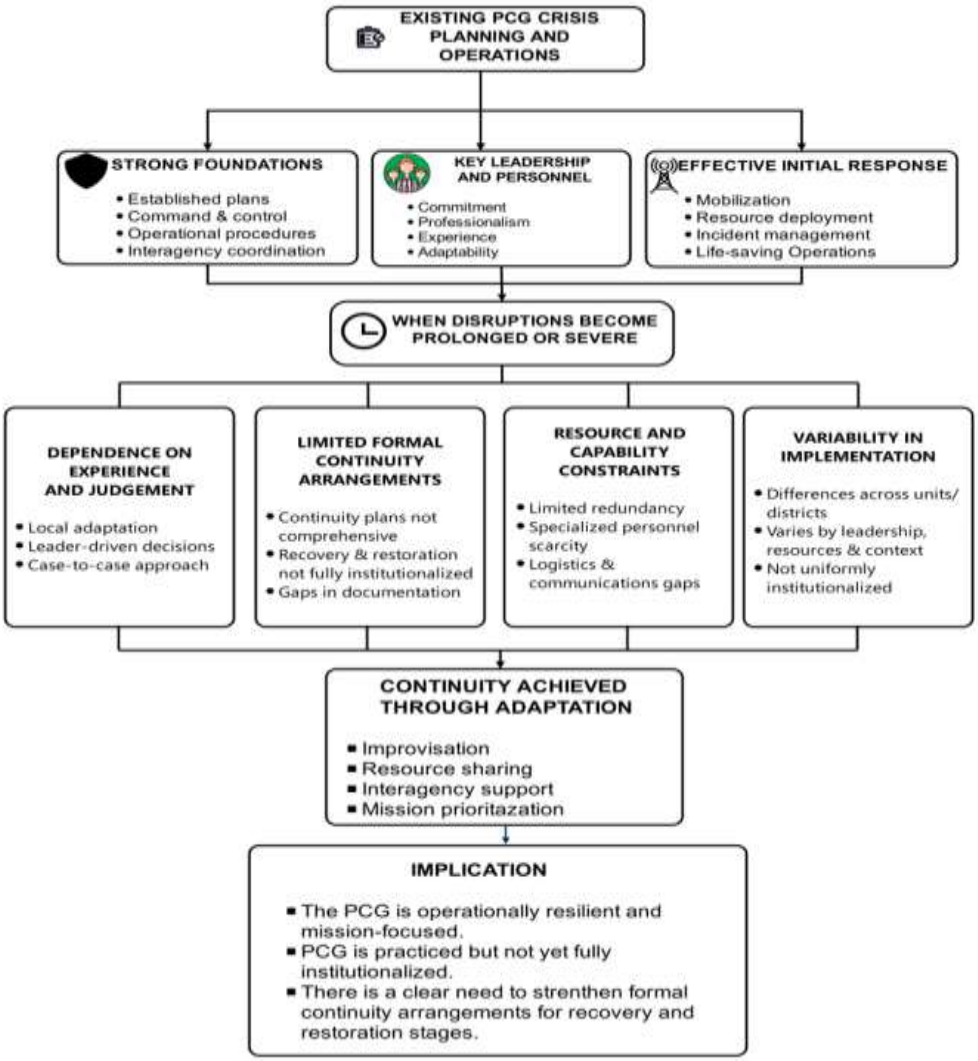


Figure 4.1. *RQ2 Mind Map: PCG leaders and key personnel description on the implementation of Public Service Continuity within existing crisis planning*

In the final analysis, it must be construed that the qualitative evidence explains the overall quantitative result of 2.44, Slightly Manifested. The PCG is not without continuity capability; instead, continuity practices are unevenly institutionalized. Responsibilities and Risk Assessment reach the Manifested range because command structures, threat awareness, and operational planning are comparatively mature. Resources, Recovery, and Restoration remain weaker because these dimensions require institutional mechanisms extending beyond the immediate response: redundancy, alternate sites, protected information, prolonged staffing, minimum service levels, predefined recovery targets, reconstitution procedures, corrective-action tracking, and enterprise learning.

The interviews therefore transform the numerical finding into an institutional explanation. The overall Slightly Manifested result does not mean that the PCG lacks resilience. The KII narratives demonstrate substantial resilience. Rather, they show that operational resilience is stronger than continuity

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institutionalization. This produces the central RQ2 meta-inference: the PCG is operationally resilient but institutionally thin in Public Service Continuity. Existing crisis planning is therefore a strong platform for PSC, but it must be extended beyond response into a formal system for sustaining, recovering, and restoring the organization itself.

Organizational, Governance, and Operational Factors that facilitated or hindered Public Service Continuity within the PCG

The narratives of the 15 Key Informants showed that PSC is shaped by three closely connected clusters: organizational, governance, and operational factors. The interviews did not portray these factors as independent. Personnel adaptability often compensated for organizational limitations; leadership compensated for incomplete governance; and local coordination, interagency support, and improvisation compensated for operational constraints. The following discussion therefore treats the three clusters as interconnected stories.

Organizational Factors

The organizational evidence initially presents a positive picture. Across the 15 interviews, personnel commitment, professionalism, adaptability, mission orientation, specialized expertise, teamwork, and willingness to improvise repeatedly emerged as the mechanisms that allowed Coast Guard units to continue functioning during disruption. Yet the same accounts revealed uneven staffing, aging infrastructure, fragmented documentation, limited redundancy, specialized personnel dependencies, weak knowledge management, and the absence of a standardized continuity framework. Organizational strength and organizational weakness therefore appeared together: personnel were able to overcome difficult conditions, but their success frequently compensated for limitations in the systems intended to sustain them.

Key Informant 1 opened the organizational story by identifying committed, adaptable, mission-oriented personnel as the Coast Guard's greatest continuity strength while also pointing to uneven staffing, infrastructure limitations, fragmented documentation, workload, and the absence of a standardized continuity system. Key Informant 2 closely corroborated this account and added limited continuity doctrine, inconsistent documentation of essential functions, fragmented knowledge management, and limited continuity-specific resources. The first two accounts therefore established the central paradox: dedicated people keep the organization functioning, but much of that functioning remains dependent on individual initiative.

Key Informant 3 reproduced the same pattern in another organizational environment, showing that professionalism and command structure coexist with staffing, resource, infrastructure, and knowledge-management constraints. This convergence moved the finding beyond a local concern. Key Informants 4 and 5 then shifted the story toward institutional learning, arguing that continuity should be embedded in doctrine, education, inspections, and knowledge systems so that organizational capability survives personnel and leadership changes. Their accounts explained how field experience must be converted into institutional memory.

Key Informant 6 qualified the broader personnel narrative by showing that continuity in specialized operations depends on competency and redundancy, not merely headcount. Highly skilled personnel, disciplined maintenance, and safety culture facilitate continuity, yet scarce specialized expertise and limited redundancy create vulnerability. Key Informant 7 offered a parallel specialized perspective: technical expertise and strong partnerships sustain operations, but knowledge management and recovery systems remain insufficiently institutionalized.

Key Informants 8, 9, and 10 extended the convergence across other mission functions. Each identified dedicated personnel and established operational procedures or coordination as strengths, while limited recovery planning and the absence of a comprehensive continuity framework remained recurring barriers. Their accounts demonstrated that the organizational imbalance is not mission-specific: response

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capability is consistently more formalized than the organizational mechanisms that preserve capability over time.

Key Informant 11 transformed the recurring observation into an institutional critique by explaining that the Coast Guard's greatest strength – people who always find a way to accomplish the mission – can also become a weakness when the organization becomes too dependent on individual initiative. Key Informant 12 went further, warning that exceptional personnel can make weak systems appear adequate, thereby reducing the visibility of the institutional gap. Key Informants 13 and 14 then reinforced the consequence: continuity should not depend on exceptional commitment or exceptional leadership; the system itself must remain resilient despite personnel changes. Finally, Key Informant 15 closed the organizational narrative by observing that adaptability can mask organizational weaknesses because personnel repeatedly accomplish the mission even when systems are inadequate.

When the 15 accounts were read together, their apparent differences resolve into a common organizational explanation. Key Informants 1 through 3 establish the people-centered source of resilience; Key Informants 4 and 5 show why experience must be converted into doctrine and institutional learning; Key Informants 6 and 7 reveal the risk created by scarce specialized expertise; Key Informants 8 through 10 show that the pattern crosses core mission functions; Key Informants 11 and 12 explain how successful human compensation can conceal weak systems; and Key Informants 13 through 15 show that resilience must ultimately reside in the organization rather than in exceptional individuals. The differences are therefore complementary perspectives on one institutional condition rather than conflicting findings.

The organizational finding can thus be interpreted as a distinction between human resilience and institutional resilience. The PCG already possesses considerable human resilience. What remains less developed is the systematic conversion of that resilience into transferable organizational capability through alternates, cross-training, knowledge preservation, documented essential functions, succession of specialized responsibilities, redundancy, and continuity-specific institutional arrangements.

The organizational narratives explain an important quantitative relationship. "Responsibilities" was Manifested at 2.53, while "Resources" was Slightly Manifested at 2.33. The PCG generally knows who exercises command and responsibility, but formal responsibility does not automatically provide the personnel depth, specialized replacement capability, facilities, communications, logistics, information, and other resources needed to sustain that responsibility during prolonged disruption. The narratives therefore qualify the strength of Responsibilities: succession of authority is stronger than succession of capability.

The deeper analysis is that the PCG is adaptive, but portions of that adaptability remain person-dependent. The requirement is not to suppress initiative with rigid procedures; it is to institutionalize adaptability by identifying mission-essential functions, assigning owners and alternates, cross-training personnel, documenting critical procedures and relationships, preserving continuity knowledge, and assuring resource depth. In this way, the organization retains the strengths of its people while reducing dependence on particular individuals.

Governance Factors

The governance narrative also revealed a dual condition. Leadership was consistently described as a powerful facilitator of preparedness, readiness, learning, and continuity. Existing policies provide substantial direction for operational response. However, the interviews repeatedly distinguished governance of operations from governance of continuity. Continuity requirements remain dispersed, standardized PSC planning and performance requirements are limited, and implementation can consequently vary according to leadership, command priorities, and available resources.

Key Informants 1, 2, and 3 consistently described leadership as decisive in determining whether continuity becomes part of routine preparedness or remains limited to emergency compliance. At the same time, all three pointed to the absence of organization-wide continuity planning requirements, performance measures, exercises, reporting systems, audits, and governance mechanisms. Their accounts show that

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leadership can make continuity work locally, but local leadership is still being asked to compensate for incomplete enterprise governance.

Key Informants 4 and 5 shifted the argument from strong leadership toward institutional permanence. Both acknowledged that leaders establish priorities, but both cautioned that continuity should not depend on who happens to lead a command. Doctrine, education, inspections, policy, and standardized requirements were identified as the mechanisms through which continuity survives leadership turnover. Key Informants 6 through 10 reinforced this conclusion from different mission settings: existing policies effectively support operational readiness, safety, security, environmental response, and search and rescue, yet continuity-specific recovery and restoration governance remains comparatively limited.

The critique became sharper with Key Informant 11, who argued that continuity cannot depend on the identity of the commander and observed that operational policies are far more developed than policies governing continuity itself. Key Informant 12 similarly described continuity as potentially optional rather than institutional when policy is absent. Key Informants 13 and 14 noted that fragmented policy allows recovery and restoration to be handled differently among commands. Key Informant 15 closed the governance narrative by observing that continuity responsibilities are dispersed across issuances and would benefit from unified direction and accountability.

The governance accounts tell a progression from leadership-driven continuity toward institution-driven continuity. Key Informants 1 through 3 demonstrate that leadership currently determines much of implementation strength. Key Informants 4 and 5 explain why that arrangement is insufficient for long-term resilience. Key Informants 6 through 10 demonstrate that the gap persists across multiple functional areas despite strong mission-specific policies. Key Informants 11 through 14 identify the consequence – continuity practices vary when policy and accountability are fragmented – while Key Informant 15 points toward unified PSC governance. The apparent tension between "leadership is essential" and "continuity should not depend on leaders" is therefore not contradiction; it represents two levels of institutional maturity.

The governance problem is not primarily a lack of command authority. It is the absence of a sufficiently integrated mechanism that translates authority into common PSC standards, ownership, accountability, measurement, exercises, inspections, budgeting, corrective action, and continuous improvement. This explains why capable commands can develop effective local solutions while organization-wide consistency remains difficult. The required response is neither complete centralization nor unrestricted local discretion: NHQ should establish minimum continuity standards and enterprise oversight, while commands and districts tailor implementation to their hazards, missions, geography, resources, and dependencies.

Operational Factors

Operationally, the interviews described a Coast Guard with strong response capability, established interagency relationships, decentralized decision-making, and substantial experience operating across a difficult archipelagic environment. These factors facilitate immediate action. At the same time, geographic dispersion, weather, communications limitations, logistics distance, resource constraints, external dependencies, and prolonged operations create significant continuity risks. The same features that make the PCG flexible can therefore also make continuity uneven when common standards and redundancy are insufficient.

Key Informant 1 described strong relationships with government agencies, local authorities, telecommunications providers, shipping companies, and other stakeholders as an important extension of PCG capability, but warned that widespread disasters can affect those partners simultaneously. Geography intensified the problem through long sea distances, weather-dependent transport, uneven communications, and differences in infrastructure. Key Informants 2 and 3 strongly corroborated this duality: interagency partnerships strengthen operational effectiveness, yet those partners can experience the same

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communication failures, personnel shortages, infrastructure damage, and logistical constraints as the Coast Guard.

Key Informants 4 and 5 broadened the implication by arguing that external partnerships should complement rather than substitute for internal continuity capability. Both also linked decentralized execution to the need for common doctrine and training. Key Informant 6 showed how the same condition affects specialized support: aviation can connect dispersed units rapidly, but aviation itself depends on maintenance, logistics, air-traffic coordination, external agencies, and specialized support systems. Key Informant 7 presented a parallel condition in environmental operations, where technical partnerships strengthen response while simultaneous disruption of partners remains a continuity risk.

Key Informants 8, 9, and 10 continued the pattern. Strong stakeholder and interagency coordination supported operations, while the dispersed maritime environment required decentralized action. Each nevertheless returned to the need for standardized continuity procedures so that decentralization would produce flexibility without producing unequal continuity capability. Key Informants 11 and 12 then made the operational risk more explicit: coordination may be excellent, but external assistance cannot simply be assumed during catastrophic disruption, and decentralized operations can produce fragmented continuity standards when no common framework exists.

Key Informants 13 and 14 similarly characterized interagency coordination as a strength while warning that catastrophic events can overwhelm partners at the same time. Finally, Key Informant 15 corroborated the need for internal resilience but introduced a useful qualification to the dominant emphasis of the preceding accounts. Rather than identifying only the weaker institutional areas, the informant argued that all five Rs require attention because Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy are interconnected. This divergence broadens rather than overturns the earlier findings: specific gaps may be more visible, but continuity succeeds only when the five dimensions operate as one system.

The operational narratives reveal that decentralization and interagency coordination are simultaneously sources of resilience and sources of exposure. Key Informants 1 through 3 establish this duality; Key Informants 4 and 5 explain the need for stronger internal capability and common doctrine; Key Informants 6 and 7 show how specialized missions reproduce the same dependency; Key Informants 8 through 10 demonstrate its recurrence across other functions; Key Informants 11 through 14 expose the risks of assuming external availability and allowing decentralized continuity standards to develop independently; and Key Informant 15 places these issues within an interconnected 5R system. Decentralization is therefore necessary in an archipelagic organization, but it must be bounded by common continuity standards and supported by internal redundancy.

The operational evidence helps explain why Resources and Recovery remained among the weaker quantitative dimensions. Strong partnerships and operational improvisation can temporarily compensate for limited internal redundancy, but they cannot guarantee continuity during a disruption that simultaneously affects the PCG and its partners. PSC must therefore be designed for degraded operations, not ideal conditions. Plans should assume that communications may fail, transportation may be delayed, key personnel may be unavailable, facilities may be inaccessible, partners may be overwhelmed, and logistics may be interrupted. This requires alternate operating arrangements, redundant communications, resource registers, minimum service levels, recovery targets, mutual-aid arrangements, and exercised recovery playbooks.

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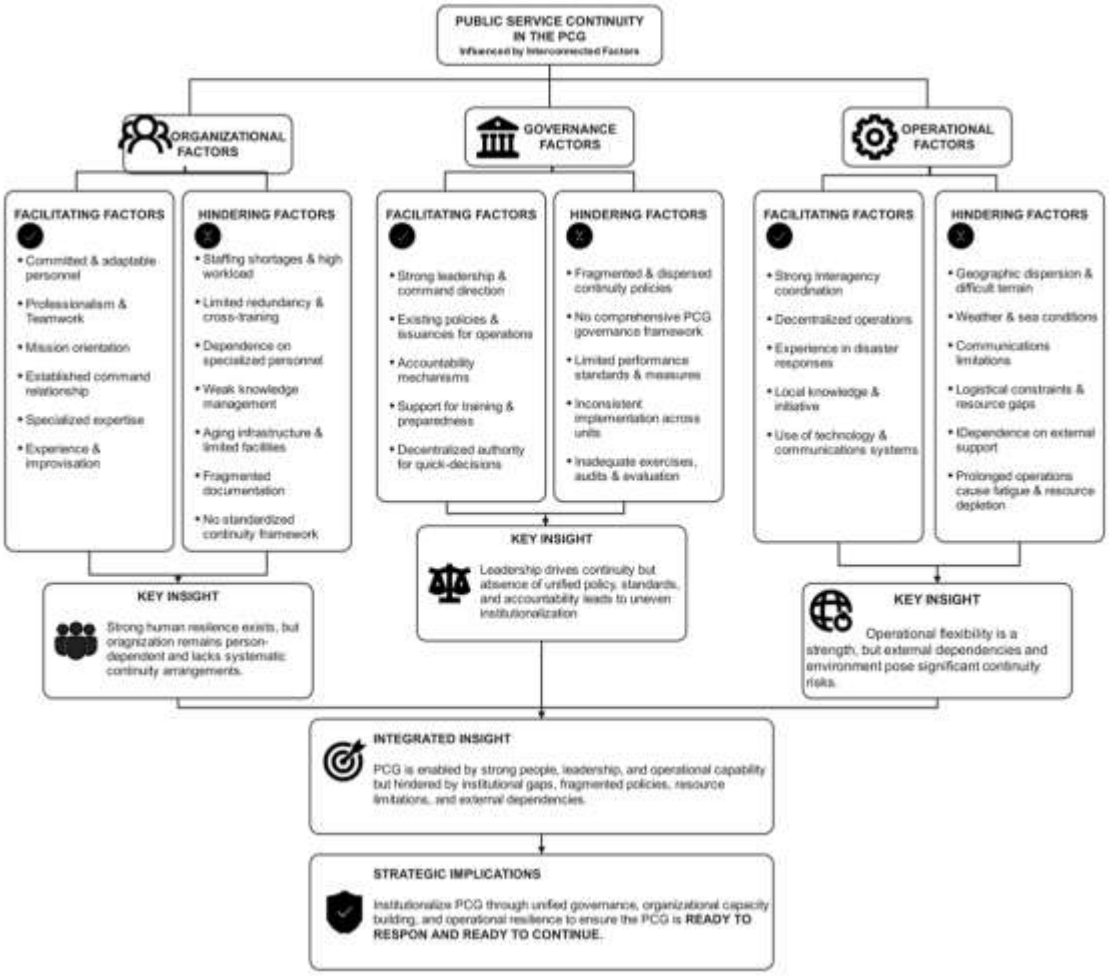


Figure 4.2. *RQ3 Mind Map: Organizational, Governance, and Operational Factors that facilitated or hindered Public Service Continuity*

Integrated RQ3 Synthesis

Across the three clusters, the 15 Key Informants ultimately tell one institutional story. Organizationally, people compensate for weak systems. Governance-wise, leaders compensate for incomplete institutional requirements. Operationally, local initiative and external partners compensate for limited redundancy and difficult geography. These compensating mechanisms explain why the PCG can remain operational despite an incompletely institutionalized PSC system. They also explain why operational success alone cannot be treated as evidence of full organizational continuity. The institutional challenge is to convert these existing sources of resilience into durable capability: people's adaptability into organizational knowledge; leadership initiative into governance; local improvisation into exercised procedures; interagency cooperation into planned mutual support; and successful response into measurable recovery and restoration.

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Table 15. *Facilitators and Barriers to Public Service Continuity*

Factor	Facilitators	Barriers	PSC Implication
Organizational	Professionalism; adaptability; mission commitment; experienced personnel.	Person-dependent expertise; uneven documentation; staffing/workload constraints; inconsistent continuity standards.	Institutionalize knowledge, cross-training, and common continuity standards without reducing local initiative.
Governance	Clear chain of command; planning/reporting culture; interagency partnerships; established coordination forums.	No dedicated PSC ownership; limited continuity policy, metrics, budget linkage, and exercise cycle; external dependencies not always formalized.	Create NHQ-led PSC governance, focal points, dashboard, and formal mutual-support procedures.
Operational	Decentralized judgment; rapid local adaptation; resource sharing; field coordination.	Geographic dispersion; remote stations; communications/transport disruption; inadequate backup sites/systems; reactive recovery.	Tailor district continuity arrangements to AOR risks while meeting common minimum standards.

Strength–Gap Matrix

The integrated findings from RQ1, RQ2, and RQ3 were consolidated into a Strength–Gap Matrix. The matrix identifies what the PCG already does well, the principal continuity gaps, the relationship among the evidence sources, and the design requirement that should be carried into the proposed continuity architecture and plan.

Table 16. *Integrated Strength–Gap Matrix and Design Requirements*

5R/Area	Established Strength	Principal Gap	Evidence Relationship	Design Requirement
Risk Assessment	Hazard awareness, readiness planning, operational threat assessment.	Essential-function impact analysis, downtime/service thresholds, dependency mapping.	Survey strength qualified by KII/documents.	Essential-functions register; continuity risk/BIA; minimum service levels; risk register.
Resources	Resource sharing, augmentation, partner support.	Alternate sites, comms failover, staffing depth, vital records, finance/logistics buffers, formal mutual aid.	Strong convergence on gap.	Continuity resource register; costed gap plan; tested alternates and mutual aid.
Responsibilities	Clear command relationships and leadership succession.	Specialized succession, delegations, role coverage, knowledge transfer.	Survey strength qualified by KII.	Owner/deputy matrix; delegation register; cross-training; turnover packs; knowledge repository.
Recovery	Experienced commanders can restore operations under pressure.	Predefined priorities, service levels, recovery targets, alternate	Survey/KII/documents converge.	Trigger-based recovery playbooks and annual testing.

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		procedures, continuity exercises.		
Restoration	After-operation reporting and commander-led normalization.	Formal reconstitution, corrective-action tracking, enterprise learning, retesting.	Complementarity/qualification.	Restoration protocol; AAR-to-corrective-action loop; closure evidence and retest.
Governance	Strong command culture and existing planning forums.	No unified PSC ownership, minimum standard, dashboard, or routine oversight.	Cross-cutting meta-inference.	NHQ PSC policy; focal points; standing governance agenda; inspections/performance dashboard.

Public Service Continuity Framework that may be proposed for the Philippine Coast Guard

Research Question 4 translates the integrated empirical findings of the study into its principal output: the A3R2 Continuity Management Framework for the Philippine Coast Guard. The framework was developed by the author from the quantitative assessment of the 5Rs, the explanatory findings from the Key Informant Interviews, the documentary analysis of existing PCG plans, and the integrated Strength–Gap Matrix. Together, these findings showed that the PCG already possesses important elements of continuity, particularly in Responsibilities and Risk Assessment, but remains less developed in Resources, Recovery, and Restoration of Normalcy.

The integrated findings further revealed a consistent institutional pattern. The PCG is comparatively strong in recognizing risks, assigning command responsibility, mobilizing operational resources, adapting during disruption, and restoring routine operations. However, continuity remains less institutionalized in areas such as formal identification of mission-essential functions, resource redundancy and assurance, transfer of specialized knowledge, predefined recovery requirements, validated reconstitution, corrective-action closure, and continuous improvement. The issue, therefore, is not the absence of continuity capability, but the absence of a single management process that systematically connects these existing strengths and developmental gaps.

From this empirical pattern emerged the A3R2 Continuity Management Framework: Assess, Assure, Assign, Recover, and Restore. A3R2 operationalizes the nationally prescribed 5Rs of NDRRMC Memorandum Circular No. 33, s. 2018 by translating them into a recurring and executable management cycle suited to the operational and organizational context of the PCG. Rather than treating the 5Rs as separate areas of assessment, A3R2 connects them sequentially so that continuity decisions made in one stage directly inform the next.

Before the A3R2 framework was formulated, the findings were first organized into a Public Service Continuity Plan Architecture. The architecture served as the institutional design generated from the study's evidence. It consolidated the strengths and gaps identified across the five dimensions and defined the elements that must be present for the PCG to sustain essential public services when normal personnel, facilities, communications, information systems, logistics, or command arrangements are degraded.

The architecture therefore provides the structural basis of continuity by linking governance, mission-essential functions, resource requirements, responsibility ownership, recovery arrangements, restoration mechanisms, exercises, monitoring, and organizational learning. Its purpose is not to function as the final output of the study, but to provide the institutional structure from which the A3R2 Framework was derived.

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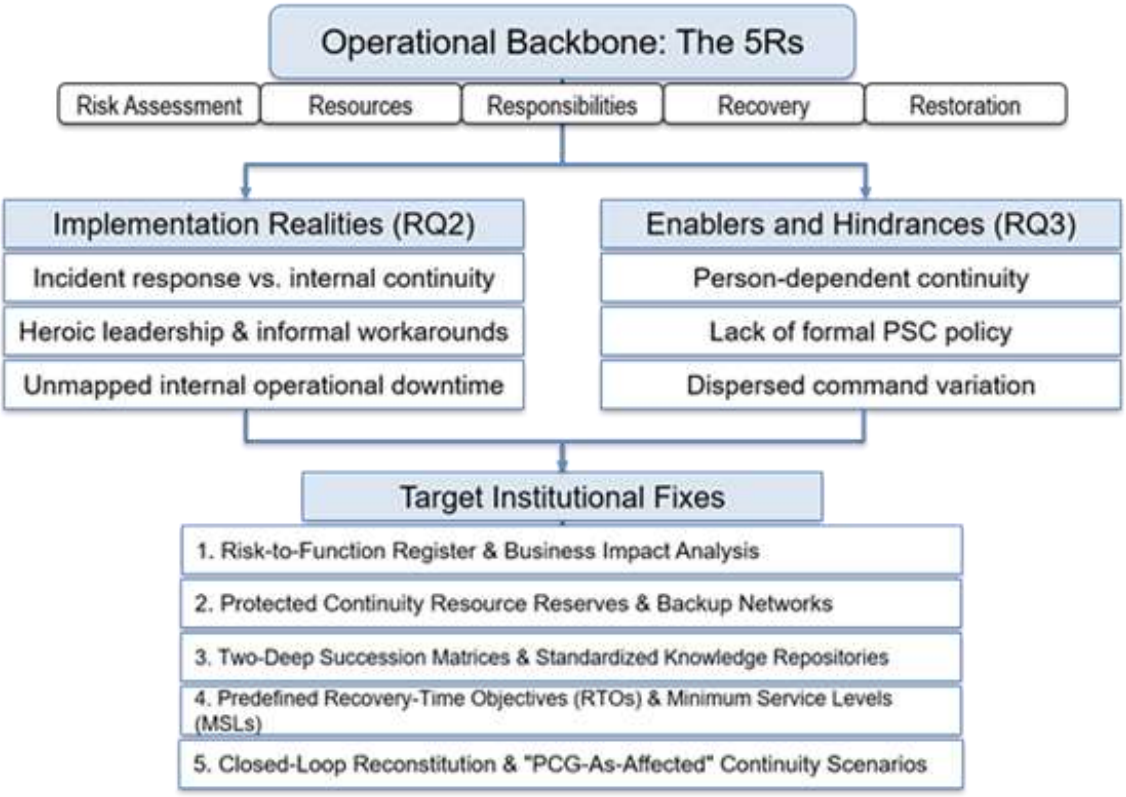


Figure 4.3. *Proposed PSC Architecture*

The A3R2 Continuity Management Framework is the central product of the study because it converts this architecture into an actionable management process. Each component responds directly to the empirical findings. Assess establishes what must continue and what can disrupt it. It requires the PCG to identify and prioritize mission-essential functions, determine the hazards and vulnerabilities affecting those functions, map critical internal and external dependencies, and establish acceptable minimum service levels, maximum tolerable downtime, and recovery targets. This component responds directly to the Risk Assessment finding that the PCG is already strong in operational threat awareness but less consistent in formal continuity-impact analysis.

Assure determines and secures what is necessary to keep mission-essential functions operating during disruption. It connects each essential function to its required personnel, facilities, alternate operating sites, communications, information, logistics, financing, and mutual-support arrangements. It also requires the identification of critical dependencies, single points of failure, alternates, reserves, and redundancies. This responds directly to the Resources finding that the PCG possesses operational resource capacity, but that availability has not yet been uniformly converted into assured continuity capability.

Assign ensures that responsibility and capability remain available even when normal personnel arrangements are disrupted. It establishes function ownership, alternates, succession, delegated authority, cross-training, structured knowledge transfer, role-specific job aids, and access to critical institutional knowledge. This addresses the Responsibilities finding that continuity of authority is more developed than continuity of specialized capability.

Recover establishes how disrupted mission-essential functions are restored within predefined priorities and targets. It requires minimum-service arrangements, alternate methods of service delivery,

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recovery priorities, procedures, resource requirements, and tested recovery playbooks. This responds to the Recovery finding that PCG units are operationally capable of recovering functions, but that recovery remains comparatively dependent on incident-time judgment rather than standardized and function-specific arrangements.

Restore completes the continuity cycle by ensuring that the PCG returns not merely to normal operations, but to a verified and improved normal condition. It requires reconstitution criteria, validation of restored systems and capabilities, continuity-focused after-action review, assignment and tracking of corrective actions, incorporation of lessons into plans and training, and periodic retesting. This responds to the Restoration of Normalcy finding that the PCG is capable of returning to operations but is less consistent in converting operational experience into sustained institutional improvement.



Figure 4.4. *A3R2 Continuity Management Framework*

The strength of A3R2 lies in the relationship among its five components. Assess identifies what must continue and what can threaten it. Assure determines what resources and redundancies are required. Assign ensures that authority, responsibility, knowledge, and capability remain available. Recover restores disrupted mission-essential functions according to predefined priorities and requirements. Restore verifies stabilization, captures lessons, closes identified gaps, and feeds improvements back into the next Assess cycle.

A3R2 is therefore not merely a renaming of the NDRRMC 5Rs. It represents their operationalization into a recurring management cycle. The framework transforms the study's empirical findings into a practical continuity-management logic that can be applied before, during, and after disruption. More importantly, it provides the institutional bridge between what the PCG already does well and what must still be strengthened.

The framework is further reinforced by the theoretical lenses of the study. Continuity Management Theory supports the recurring nature of A3R2 by emphasizing that continuity must be planned, implemented, monitored, evaluated, corrected, and continuously improved. The principles of Continuity of Operations reinforce the identification of mission-essential functions, succession, alternate facilities,

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communications, vital records, recovery, and reconstitution. Organizational resilience and adaptive capacity explain how the PCG currently compensates for continuity gaps through leadership, improvisation, inter-unit support, and interagency cooperation. A3R2 institutionalizes these adaptive strengths so that continuity depends less on improvisation and more on predetermined and tested arrangements.

The resulting meta-inference is that the PCG does not require an entirely new operational culture to achieve Public Service Continuity; rather, it requires a management framework that connects, standardizes, and institutionalizes the continuity practices already present across the organization. A3R2 provides that management logic by transforming fragmented strengths and identified gaps into a single continuity cycle.

The A3R2 Framework consequently becomes the principal answer to Research Question 4. It provides the PCG with an evidence-based management mechanism for sustaining mission-essential public services when normal organizational arrangements are disrupted. The PSCP Architecture defines the institutional elements that must exist, while A3R2 provides the management process through which those elements are continuously assessed, assured, assigned, recovered, and restored.

The framework may subsequently be translated into an executable plan through OPLAN "KATATAGAN." The OPLAN is therefore not the principal product of the study but the operational application of A3R2. It converts the framework into specific command relationships, responsibilities, procedures, resource requirements, recovery arrangements, coordinating instructions, monitoring mechanisms, exercises, and restoration processes. The author drafted the proposed OPLAN "KATATAGAN" out of the A3R2 framework which will form part of the study contribution. However, considering the security classification of the OPLAN, the proposed OPLAN KATATAGAN will remain in the author's file for submission to the PCG Headquarters for implementation.

The progression of the study is therefore clear and connected. The empirical findings were synthesized through the Strength–Gap Matrix and translated into the proposed PSCP Architecture, which provided the institutional basis for developing the Author's A3R2 Continuity Management Framework; the framework, in turn, was operationalized through OPLAN "KATATAGAN" as its practical application within the PCG.

In this progression, the PSCP Architecture provides the design, the A3R2 Framework provides the management logic, and OPLAN "KATATAGAN" provides the operational application. The central contribution of the study is therefore the Author's A3R2 Continuity Management Framework, because it converts the empirical findings and the nationally prescribed 5Rs into a PCG-specific, recurring, and operationally usable continuity-management process.

Ultimately, A3R2 provides the management logic through which the Philippine Coast Guard can move from being primarily ready to respond toward being institutionally ready to continue.

Following table illustrates how the PSCP Architecture, derived from the quantitative 5R results, KII explanations, documentary analysis, joint display, and Strength–Gap Matrix, was translated into the Author's A3R2 Continuity Management Framework as the principal product of the study. Through Assess, Assure, Assign, Recover, and Restore, A3R2 transforms the identified continuity requirements into a recurring and actionable management cycle: Assess determines what must continue and the risks and dependencies affecting it; Assure secures the necessary resources and redundancies; Assign establishes ownership, succession, authority, and knowledge continuity; Recover provides predefined arrangements for restoring mission-essential functions; and Restore institutionalizes reconstitution, validation, corrective action, learning, and continuous improvement. Thus, the progression moves from empirical findings to the Strength–Gap Matrix, to the PSCP Architecture, and ultimately to A3R2 as the study's evidence-based management framework, while OPLAN "KATATAGAN" is subsequently formulated as an operational application of A3R2, demonstrating how the framework may be translated into the PCG's existing operational-planning and execution system

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Table 17. *Translation of the PSC Architecture into the Author's A3R2 Continuity Management Framework and Its Subsequent Operational Application*

PSCP Architecture Requirement Derived from the Findings	A3R2 Element	Translation into the A3R2 Continuity Management Framework	Subsequent Application in OPLAN "KATATAGAN"
Mission-essential functions; continuity risks; vulnerabilities; critical dependencies; service and disruption thresholds	Assess	Determines what must continue, what can disrupt it, what it depends upon, the minimum level at which it must operate, and how long disruption can be tolerated.	Incorporated into the Situation, assumptions, essential-function analysis, continuity-risk assessment, activation criteria, minimum service levels, and recovery targets.
Personnel; alternate facilities; communications; vital records and information; logistics; finance; mutual support; redundancy	Assure	Determines and secures what each mission-essential function requires to remain operational when normal resources or systems are degraded.	Incorporated into Administration and Logistics, alternate facilities, communications failover, vital-record protection, staffing arrangements, logistics, financing, and mutual-support provisions.
Governance; function ownership; succession; delegated authority; alternates; cross-training; knowledge continuity	Assign	Establishes who owns each essential function, who assumes responsibility when primary personnel are unavailable, what authority is delegated, and how specialized knowledge and capability are transferred.	Incorporated into the Mission, Execution, tasks to NHQ Staff, Coast Guard Districts and Functional, Support, and Training Commands, succession arrangements, delegated authorities, and coordinating instructions.
Minimum-service arrangements; recovery priorities; alternate delivery methods; recovery procedures and playbooks	Recover	Establishes how disrupted mission-essential functions are maintained at minimum acceptable levels and recovered according to predetermined priorities and targets.	Incorporated into the CONOPS, activation triggers, continuity playbooks, phased recovery actions, alternate service-delivery arrangements, and coordinating instructions.
Reconstitution; validation; organizational learning; corrective action; plan improvement; exercises and retesting	Restore	Ensures that restored functions are verified as stable, lessons are institutionalized, deficiencies are corrected, and improved continuity capability is fed back into the next assessment cycle.	Incorporated into reconstitution and transition procedures, after-action review, corrective-action tracking and closure, plan revision, exercises, validation, and retesting.

Summary of Findings

Research Question 1: *Level of Public Service Continuity Reflected in PCG Crisis Planning*

The study found that the overall level of Public Service Continuity reflected in existing PCG crisis planning was Slightly Manifested, with an overall weighted mean of 2.44 and standard deviation of 0.62. However, the five dimensions showed different levels of manifestation.

The quantitative pattern demonstrates that the PCG is strongest in Responsibilities and Risk Assessment. The organization generally knows who is responsible and is capable of identifying operational risks. The weaker dimensions emerge when these strengths must be translated into assured resources, predefined recovery arrangements, and a formal process for restoration and continuous improvement.

The integrated evidence further showed that existing PCG plans already contain important PSC elements, including command relationships, operational risk assessment, tasking, reporting, coordination, resource mobilization, and operational recovery. However, these elements are not yet systematically

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connected into a unified continuity-management system. The principal gap is therefore not the absence of continuity capability, but the incomplete institutionalization of that capability.

Research Question 2: ***Implementation of Public Service Continuity in Existing Crisis Planning and Actual Operational Practice***

The Key Informant Interviews showed that PSC already exists in PCG practice, but is more strongly embedded in operational behavior than in a distinct institutional continuity-management system.

Existing crisis plans effectively establish command relationships, activation, deployment, communications, reporting, resource mobilization, and interagency coordination. These arrangements are particularly effective during immediate emergency response. As disruption becomes prolonged, however, continuity increasingly depends on the experience and judgment of commanders and personnel, local adaptation, improvisation, resource sharing, and support from other PCG units and partner agencies.

The interviews therefore revealed an important distinction between response capability and continuity capability. The PCG has considerable experience responding to emergencies, but sustaining its own mission-essential functions when personnel, facilities, communications, information systems, logistics, or other supporting systems are disrupted is less formally planned. Alternate facilities, prolonged staffing, protected information, minimum service levels, specialized succession, recovery priorities, and restoration criteria are frequently less predetermined.

The central finding is therefore that the PCG is operationally resilient but institutionally thin in Public Service Continuity. Its people, command structure, experience, adaptability, inter-unit cooperation, and interagency relationships enable operations to continue despite institutional gaps. These strengths, however, should support rather than substitute for formal continuity arrangements.

Research Question 3 : ***Organizational, Governance, and Operational Factors Facilitating or Hindering Public Service Continuity***

The study identified three interconnected groups of factors affecting PSC: organizational, governance, and operational factors.

Organizationally, the PCG's greatest continuity strength is its people. Commitment, professionalism, expertise, adaptability, and willingness to improvise enable units to continue operating under difficult conditions. However, these strengths also reveal a vulnerability when continuity becomes dependent on particular individuals, specialized personnel, undocumented knowledge, or informal arrangements.

From a governance perspective, leadership strongly influences continuity preparedness and implementation. However, continuity requirements remain dispersed and are not yet governed by a sufficiently unified PSC policy, ownership structure, performance system, exercise cycle, or oversight mechanism. Consequently, continuity capability may vary across commands depending on leadership priorities and available resources.

Operationally, decentralized decision-making and interagency partnerships provide significant resilience, particularly given the PCG's geographically dispersed and archipelagic operating environment. At the same time, geography, weather, logistics distance, communications limitations, and dependence on external partners create continuity risks. The evidence therefore supports a system in which NHQ establishes common minimum PSC standards while Districts and Commands tailor implementation to their respective missions, hazards, geography, resources, and dependencies.

Overall, the three factors reveal a common institutional pattern: people compensate for weak systems, leaders compensate for incomplete governance, and local initiative and external partners compensate for limited redundancy. The challenge is to transform these compensating strengths into durable institutional capability.

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Research Question 4: ***Public Service Continuity Framework for the Philippine Coast Guard***

The integrated findings from Research Questions 1, 2, and 3 were consolidated through the Strength–Gap Matrix and translated into the proposed Public Service Continuity Plan Architecture and the Author's A3R2 Continuity Management Framework.

The PSC Architecture identifies the institutional requirements for continuity, including governance, mission-essential functions, resource assurance, responsibility ownership, recovery arrangements, restoration mechanisms, exercises, monitoring, and organizational learning.

From this architecture emerged the study's principal contribution, the A3R2 Continuity Management Framework, consisting of Assess, Assure, Assign, Recover, Restore or the A3R2. Assess identifies what must continue, what can disrupt it, its critical dependencies, acceptable minimum service levels, maximum tolerable downtime, and recovery targets. Assure determines and secures the personnel, facilities, communications, information, logistics, financing, redundancies, and support arrangements required to sustain mission-essential functions. Assign establishes ownership, succession, delegated authority, alternate personnel, cross-training, and knowledge continuity so that both authority and capability survive personnel disruption. Recover establishes predefined priorities, alternate methods, resource requirements, procedures, and tested playbooks for restoring disrupted mission-essential functions. Restore provides for verified reconstitution, validation of restored capabilities, after-action review, corrective-action tracking, incorporation of lessons, retesting, and continuous improvement.

A3R2 therefore operationalizes the nationally prescribed 5Rs into a recurring PCG continuity-management cycle. The PSC Architecture provides the institutional design; A3R2 provides the management logic; and OPLAN "KATATAGAN" provides the subsequent operational application which the author has drafted already for submission to PCG Headquarters for subsequent implementation.

CONCLUSION

Based on the findings, the study concludes that the Philippine Coast Guard possesses a substantial foundation for Public Service Continuity, but this foundation has not yet been fully institutionalized into a comprehensive continuity-management system.

First, the overall PSC rating of Slightly Manifested does not indicate that the PCG lacks resilience. Rather, the organization demonstrates considerable operational resilience through established command structures, experienced personnel, operational risk awareness, adaptability, resource sharing, and interagency cooperation. The principal institutional issue is that these capabilities are more developed for responding to disruption than for sustaining the organization through disruption.

Second, the relative strength of Responsibilities and Risk Assessment demonstrates that the PCG already possesses two important foundations for continuity: it generally knows what can threaten operations and who is responsible for acting. However, continuity becomes less institutionalized when the organization must determine what must continue, what resources must remain available, how disrupted functions must recover, and how the organization verifies that it has returned to an improved normal condition.

Third, the PCG's continuity capability remains significantly supported by human adaptability. Personnel and commanders compensate for gaps through experience, improvisation, professional relationships, local initiative, inter-unit support, and interagency cooperation. While these are valuable resilience characteristics, prolonged continuity should not depend principally on exceptional individuals or incident-time improvisation. Human resilience must be converted into institutional resilience.

Fourth, the study concludes that the PCG does not require an entirely new crisis-planning culture. Existing plans and operational practices already contain many of the necessary building blocks. What is required is a formal mechanism that connects, standardizes, institutionalizes, tests, and continuously improves these existing capabilities across the organization.

Finally, the evidence supports the A3R2 Continuity Management Framework as the principal framework arising from the study. A3R2 converts the 5Rs into an interconnected management cycle that

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allows the PCG to move systematically from identifying continuity requirements, to assuring resources, assigning responsibility and capability, recovering essential functions, and restoring the organization to a verified and improved condition. In this sense, the institutional direction for the PCG is a progression from being principally ready to respond toward being both ready to respond and ready to continue.

The central conclusion of the study is that the PCG does not need to start Public Service Continuity from zero. It already possesses many of its essential foundations in its command system, operational planning, risk awareness, personnel, resource-sharing mechanisms, adaptive culture, and interagency relationships. The institutional requirement is to connect these strengths, address identified gaps, and transform them into a deliberate, measurable, tested, and continuously improving continuity-management system.

The proposed PSC Architecture establishes what the institution needs; the A3R2 Continuity Management Framework establishes how those requirements are continuously managed; and OPLAN "KATATAGAN" demonstrates how the framework may subsequently be translated into operational execution. Together, these provide a coherent pathway for strengthening the PCG from an organization that is highly capable of responding to disruption into one that is equally capable of ensuring that its mission-essential public services continue despite disruption.

Recommendations

Based on the findings and conclusions, the study recommends that the Philippine Coast Guard institutionalize Public Service Continuity through an NHQ-directed but command-tailored continuity-management system built around the proposed PSCP Architecture and A3R2 Continuity Management Framework.

1. Institutionalize a PCG Public Service Continuity Policy

PCG Headquarters should issue an organization-wide PSC policy establishing minimum continuity requirements, governance arrangements, responsibilities, reporting mechanisms, performance standards, exercise requirements, and accountability across Headquarters, Districts, Functional Commands, Support Commands, and Training Commands.

A designated PSC governance mechanism and focal points should be established to ensure that continuity becomes a standing management responsibility rather than an activity activated only during emergencies.

2. Institutionalize the A3R2 Continuity Management Framework

The PCG should adopt and further validate the Assess–Assure–Assign–Recover–Restore (A3R2) framework as the management mechanism for operationalizing the 5Rs within the Coast Guard. A3R2 should guide continuity planning, implementation, training, exercises, monitoring, evaluation, and improvement so that continuity becomes a recurring institutional process rather than a one-time planning requirement.

3. Identify and Prioritize Mission-Essential Functions

Each PCG office, District, Command, Station, and appropriate subordinate unit should identify its mission-essential functions and determine:

a. minimum acceptable service levels;
b. critical internal and external dependencies;
c. maximum tolerable downtime;
d. recovery priorities and targets; and
e. personnel, facilities, communications, information, logistics, and financial requirements necessary to sustain those functions.

These requirements should be maintained through an updated continuity risk and essential-functions register.

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4. Strengthen Continuity Resource Assurance

The PCG should move from merely identifying available resources toward assuring resources for continuity. Priority should be given to alternate operating locations, redundant communications, vital records and critical information, trained alternate personnel, logistics reserves, transportation and mobility, emergency financing, and formal mutual-support arrangements. Continuity resource requirements should be linked directly to identified mission-essential functions and periodically tested under degraded operating conditions.

5. Strengthen Succession of Capability, Not Only Succession of Authority

Existing command succession and delegation arrangements should be complemented by cross-training, alternate personnel, structured turnover packages, continuity checklists, stakeholder directories, technical documentation, and institutional knowledge repositories. Special attention should be given to functions dependent on specialized personnel so that the transfer or unavailability of an individual does not result in the loss of organizational capability.

6. Develop Function-Specific Recovery Playbooks

Commands and offices should develop concise, trigger-based recovery procedures for mission-essential functions. These should define activation conditions, minimum service arrangements, alternate procedures, recovery priorities, required resources, responsible personnel, and recovery targets. Recovery arrangements should be periodically exercised to reduce dependence on incident-time improvisation.

7. Establish a Formal Restoration and Continuous-Improvement Cycle

Restoration should extend beyond the return to routine operations. The PCG should establish procedures for validating restored systems and capabilities, conducting continuity-focused after-action reviews, assigning corrective actions, monitoring completion, updating plans and training, and retesting corrected arrangements. This will create a closed loop in which lessons from one disruption strengthen preparedness for the next.

8. Integrate PSC into Doctrine, Training, Exercises, Inspections, and Education

PSC and A3R2 should be incorporated into applicable PCG doctrine, education and training programs, command and staff courses, exercises, inspections, and planning activities. Exercises should test not only emergency response but also the ability of units to continue mission-essential functions when normal personnel, facilities, communications, information systems, logistics, or external support are unavailable.

9. Apply Common Standards with Local Adaptation

PCG Headquarters should prescribe minimum PSC standards, while Districts and Commands should be allowed to tailor their continuity arrangements according to their missions, hazards, geography, operational environment, resources, and dependencies. This approach preserves the PCG's existing strength in decentralized operational initiative while ensuring organization-wide continuity standards.

10. Operationalize the Framework through OPLAN "KATATAGAN"

Following institutional review and approval, the proposed OPLAN "KATATAGAN" may serve as the operational application of the A3R2 Framework. It should translate the PSC Architecture and A3R2 management cycle into command relationships, responsibilities, procedures, resource requirements, coordinating instructions, recovery mechanisms, exercises, monitoring, and restoration arrangements appropriate to the PCG.

The following table presents the integrated summary of the study's findings, conclusions, and recommendations across the four research questions, establishing a clear line of evidence from identified conditions to proposed institutional actions. It shows that while the PCG possesses strong operational foundations and resilience, gaps remain in the institutionalization of Public Service Continuity, particularly in resources, recovery, restoration, governance, and continuity-specific arrangements. These findings support the development of the A3R2 Continuity Management Framework, with OPLAN "KATATAGAN" serving as its proposed operational application.

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Table 18. *Summary Matrix of Findings, Conclusions, and Major Recommendations*

Research Question	Summary of Findings	Conclusions	Major Recommendations
RQ1 – Level of PSC	Overall PSC was Slightly Manifested (WM = 2.44). Responsibilities (WM = 2.53) and Risk Assessment (WM = 2.52) were Manifested, while Restoration of Normalcy (WM = 2.42), Recovery (WM = 2.39), and Resources (WM = 2.33) were Slightly Manifested.	The PCG has strong operational foundations in risk awareness and responsibility structures, but these are not yet fully integrated with resource assurance, recovery, and restoration into a complete continuity-management system.	Institutionalize an organization-wide PSC system that links and operationalizes the five continuity dimensions of Risk Assessment, Resources, Responsibilities, Recovery, and Restoration of Normalcy.
RQ2 – PSC Implementation	PSC exists in actual PCG practice but depends substantially on leadership, experience, adaptation, improvisation, resource sharing, and partnerships, particularly during prolonged disruptions. Existing crisis plans are stronger in immediate response than in sustaining essential functions through recovery and restoration.	The PCG is operationally resilient but institutionally thin in PSC. Its ability to continue operations is evident, but continuity remains significantly dependent on people and adaptive practices rather than fully institutionalized arrangements.	Convert existing operational practices into predetermined, documented, standardized, and tested continuity arrangements, reducing dependence on improvisation and individual experience during prolonged disruptions.
RQ3 – Facilitating and Hindering Factors	People, leadership, decentralization, adaptability, resource sharing, and partnerships facilitate continuity. Conversely, person-dependence, fragmented governance, limited redundancy, weak knowledge management, geographic dispersion, external dependencies, and resource constraints hinder continuity.	Human and operational resilience currently compensate for institutional gaps. The challenge is therefore to transform individual adaptability, leadership initiative, local improvisation, and partnerships into sustainable organizational capability.	Convert human and operational resilience into institutional resilience through stronger governance, common standards, knowledge management, specialized succession, resource redundancy, formal mutual-support arrangements, exercises, monitoring, and continuous improvement.
RQ4 – Proposed Framework	Integration of the quantitative, qualitative, and documentary evidence produced the PCG PSCP Architecture and the Author's A3R2 Continuity Management Framework: Assess–Assure–Assign–Recover–Restore. The Architecture establishes what institutional elements are required, while A3R2 provides the recurring management process.	The A3R2 Continuity Management Framework provides the management logic needed to connect, standardize, and institutionalize existing PCG continuity strengths while systematically addressing the gaps identified by the study.	Consider the institutional adoption, pilot implementation, and validation of the A3R2 Continuity Management Framework, using the PSCP Architecture as its institutional design and subsequently operationalizing the framework through OPLAN "KATATAGAN," subject to appropriate PCG review and approval.

From what the study found and recommended to how these recommendations can actually be carried out is the purpose of an Action Plan. Rather than introducing another set of initiatives, the Action Plan translates the recommendations into specific actions, responsibilities, outputs, and timelines. It follows the

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logic of the Author's A3R2 Continuity Management Framework namely, Assess, Assure, Assign, Recover, and Restore, so that every major action remains traceable to the findings and gaps established by the study.

Implementation is proposed in three progressive phases. During the first six months, the PCG establishes the foundation by institutionalizing PSC governance, identifying mission-essential functions, assessing dependencies, and defining minimum service and recovery requirements. From six to twelve months, the emphasis moves to assuring resources, strengthening succession of capability, developing recovery playbooks, and testing continuity arrangements. From twelve months onward, the focus shifts to restoration, exercises, corrective-action tracking, monitoring, and continuous improvement so that PSC becomes part of the regular way the PCG plans, trains, budgets, operates, and learns.

The Action Plan provides the pathway for making that change happen. The PSC Architecture defines what institutional capabilities must be built; A3R2 provides the management logic for building and sustaining them; and OPLAN "KATATAGAN" translates these into operational application. In this way, the study moves deliberately from findings, to conclusions, to recommendations, and finally to action – transforming the PCG from an organization that is already ready to respond into one that is institutionally ready to continue.

Table 19. *The PSC Action Plan for the PCG*

Timeframe	A3R2 Component	Strategic Action	Key Activities / Deliverables	Responsible Office/Unit	Success Indicator
0–6 Months	ASSESS	Establish PCG-wide PSC governance and policy	Formulate and issue a PCG PSC policy; designate PSC focal points at NHQ, Commands, and Districts; define oversight, coordination, reporting, and accountability mechanisms.	NHQ-PCG / Concerned Staff / Commands and Districts	Approved PSC policy; designated PSC focal points; established governance and reporting mechanism.
0–6 Months	ASSESS	Identify and prioritize mission-essential functions	Develop a PCG Essential Functions Register; identify critical functions, dependencies, vulnerabilities, minimum service levels, maximum tolerable downtime, and recovery targets.	NHQ Staff / Functional Commands / Districts / Support Commands	Essential functions identified and prioritized with approved service levels and recovery targets.
0–6 Months	ASSESS	Integrate continuity risk and impact assessment	Incorporate continuity-impact analysis into existing risk-assessment processes; identify single points of failure and critical internal and external dependencies; establish/update continuity risk registers.	Concerned NHQ Staff / Commands / Districts	Updated risk registers incorporating continuity impacts, dependencies, and critical vulnerabilities.
6–12 Months	ASSURE	Strengthen continuity resource assurance	Establish continuity resource registers covering personnel, alternate facilities, communications, ICT, logistics, mobility, vital records, finance, and	Concerned NHQ Staff / Support Commands / Commands and Districts	Continuity resource register completed; critical gaps identified and programmed; alternate and

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Timeframe	A3R2 Component	Strategic Action	Key Activities / Deliverables	Responsible Office/Unit	Success Indicator
			mutual support; identify and cost critical resource gaps; designate alternate and redundant resources.		redundant resources designated.
6–12 Months	ASSIGN	Strengthen succession of authority and capability	Designate primary and alternate function owners; review succession and delegation arrangements; cross-train personnel; develop job aids, turnover packages, and knowledge repositories for critical functions.	Personnel / Functional Staff / Commands / CGETDC	Primary and alternate function owners designated; critical functions supported by trained alternates and documented knowledge-transfer mechanisms.
6–12 Months	RECOVER	Develop function-specific recovery playbooks	Establish activation triggers, recovery priorities, alternate service-delivery arrangements, resource requirements, minimum operating requirements, and recovery procedures for mission-essential functions.	Functional Commands / Districts / Support Commands	Approved recovery playbooks aligned with established service levels and recovery targets.
6–12 Months	RECOVER	Pilot and validate continuity arrangements	Conduct tabletop and functional exercises in selected Commands and Districts; test alternate facilities, communications, staffing, logistics, resource-sharing arrangements, and recovery playbooks.	CGETDC / Concerned NHQ Staff / Selected Commands and Districts	Exercise results demonstrate capability and identify documented gaps and corrective actions.
12 Months and Beyond	RESTORE	Institutionalize restoration and reconstitution procedures	Establish criteria for transition from continuity operations to normal operations; conduct damage and capability validation; verify restored essential functions and unresolved vulnerabilities.	NHQ-PCG / Commands / Districts	Standard restoration protocol established; restored functions formally validated before normalization.
12 Months and Beyond	RESTORE	Establish a closed-loop corrective-action system	Conduct continuity-focused AARs; assign corrective-action owners and timelines; monitor actions to closure; integrate lessons into plans, policies, procedures, doctrine, and training; conduct retesting where necessary.	NHQ-PCG / CGETDC / Concerned Staff and Commands	Corrective actions tracked to closure and lessons demonstrably incorporated into succeeding plans, training, and exercises.

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Timeframe	A3R2 Component	Strategic Action	Key Activities / Deliverables	Responsible Office/Unit	Success Indicator
12 Months and Beyond	A3R2 Full Cycle	Integrate PSC into regular PCG institutional processes	Incorporate PSC into annual planning, programming and budgeting, training, exercises, inspections, performance monitoring, command assessments, and periodic plan reviews.	NHQ-PCG / CGETDC / All Commands and Districts	PSC requirements incorporated into recurring PCG planning, budgeting, training, exercise, inspection, and performance-management cycles.
12 Months and Beyond	A3R2 Full Cycle	Validate and institutionalize the A3R2 Framework	Pilot, assess, refine, and subject the A3R2 Continuity Management Framework and PSCP Architecture to appropriate PCG review and validation; establish mechanisms for periodic evaluation and updating.	NHQ-PCG / Concerned Staff / CGETDC / Commands and Districts	Validated A3R2 Framework and PSCP Architecture institutionalized through appropriate PCG policy and governance mechanisms.
12 Months and Beyond	Operational Application	Operationalize PSC through OPLAN "KATATAGAN"	Translate validated PSCP Architecture and A3R2 requirements into command relationships, tasks, coordinating instructions, resource requirements, recovery procedures, exercises, monitoring, and restoration mechanisms.	NHQ-PCG / Concerned Staff / All Commands	Approved and executable PCG Public Service Continuity operational plan, subject to appropriate command review and approval.

Note. The Action Plan is deliberately phased from foundation-building (0–6 months), to capability development and validation (6–12 months), and finally to institutionalization and continuous improvement (12 months and beyond). The sequence maintains the study's evidence-to-execution logic: the PSCP Architecture defines what institutional capabilities are required; the A3R2 Framework provides the management process for developing and sustaining those capabilities; and OPLAN "KATATAGAN" provides their proposed operational application.

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