



Governance Model Review

E-Comm 9-1-1

April 15, 2024

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1. Executive Summary

1.1. Background

At its inception in 1997, E-Comm Emergency Communications for Southwest British Columbia Inc. (E-Comm) operated a cooperative radio network for first responders in the Lower Mainland. More than 25 years later, E-Comm is now a vital public safety communications organization that serves the diverse communities of British Columbia by answering 99% of 9-1-1 calls in the province, providing police and fire communication operations, technology services and operating the emergency radio network used by first responders throughout the Lower Mainland. It serves more than 30 municipalities and 70 emergency response organizations.

E-Comm engaged Deloitte in October 2023 to perform this governance review as a response to the evolving complexities and challenges that E-Comm is facing in serving these key stakeholders. Deloitte compared E-Comm's governance model to peers across Canada and internationally. Deloitte also conducted more than 80 independent in-depth interviews with key stakeholders (including local government officials, police, fire, ambulance representatives, Board members and E-Comm's CEO and Executives) who provided detailed insights into the challenges and opportunities facing the organization. These insights were validated through reviews of internal and publicly available documents. The resulting summary of E-Comm's current state governance challenges and opportunities for a future-state governance model was discussed with E-Comm's Governance & Public Affairs Committee (GPAC), Board of Directors and Executives.

1.2. Key Findings

Over the past 25 years, E-Comm has significantly expanded from a cooperative style, membership-based corporation that was created to administer a wide area emergency radio network across the Lower Mainland. Today it is a full-service call taking and dispatch operation that covers 33 police agencies and 40 fire agencies, supported by 700 staff in four BC locations. E-Comm answers 99% of the 2 million emergency calls made annually by British Columbians. However, the governance framework, operating model, technology infrastructure and capital funding structure have not kept pace with this significant growth.

The shareholder structure, with its voting classes, was designed for the original radio network subscribers. With E-Comm's expanded operations, its governance is marred by significant inequities in its shareholders' rights and influence, board representation, calculation and allocation of operational overheads and capital requests, and challenges in its ability to effect change in the delivery of its services. The Board is cumbersome and unwieldy, with 23 directors – most representing a local government, a group of local governments or user shareholders. The directors are appointed for a term of one year and often do not remain beyond a second term. This has resulted in various challenges for the Board in its directors' understanding the complexities of the business model, providing effective oversight, approving and supporting the necessary capital investments required, and holding management accountable to key financial and performance metrics.

More concerning is the fact that E-Comm has been operating in a deficit position for a number of years as revenues are insufficient to cover its costs of growth and operation. The deficit has continued to grow to \$7.2M in fiscal 2023. This is not a sustainable financial operating model and certainly one that is greatly restricting E-Comm's ability to invest in technology, process efficiency and organizational transformation. The root causes of these deficits stem from a structural historical underinvestment in automation, unrealized economies of scale and global efficiency opportunities, and a lack of understanding and failure to determine the actual operating costs and the cost of investments required by E-Comm to sustain and scale the current model. The Members' Agreement provides E-Comm with the ability to recover these operating costs and deficits from its members through cost allocation and rate provisions. Moreover, there

is a lack of desire by key stakeholders to contribute more to E-Comm's capital and operating costs until it achieves credible operational and financial stability.

Beyond these financial issues, challenges at the service delivery level, including the lack of clear contractual terms and metrics, as well as pressure from users to customize service delivery processes, deliverables, resourcing and other specific needs, manifests in governance challenges because of the resultant operational complexity. This bespoke service delivery model, where each customer often has a different suite of services, operating with unique sets of call answer procedures, and resourced specifically for their needs (which can occasionally result in some agents being quiet while others are overworked), has compromised E-Comm's effectiveness, sustainability, and scalability. This model has constrained E-Comm from creating the requisite economies of scale across the regions and agencies it serves. Despite management's reactive, "firefighting" orientation, there has been a more recent focus on transforming and streamlining E-Comm's operations. E-Comm has made significant strides in harmonizing and simplifying its standard operating procedures (from 1,500 to less than 150) and is poised to capitalize on other economies by deploying business intelligence technology and rebalancing resources within the organization.

To further complicate matters, the federal government has mandated a shift to Next-Generation 9-1-1 (NG9-1-1) systems and technologies by 2025. The CRTC requires all telecommunications providers and Canadian PSAPs to implement these technologies, which will allow callers to transmit texts, images, video, and other data to 9-1-1 call takers and will allow similar digital communications between 9-1-1 call takers and emergency responders. There are many stakeholders and active parties involved in the transition to NG9-1-1 technology, with several factors that are beyond E-Comm's direct control. Despite good progress and a strong transformation office within E-Comm, there is a concern amongst external stakeholders that E-Comm does not have the governance structure necessary to provide oversight to ensure that E-Comm is capable and accountable for meeting NG9-1-1 service delivery expectations. As such, there is a strong reluctance to provide further investment for the technology environment. Overcoming this will require a significant increase in trust in E-Comm's financial management, service delivery, change management and relationship management capabilities.

1.3. Conclusions

E-Comm's operating paradigm has changed dramatically since it was conceived. The increased number of stakeholders, rapid pace of technological change, pressure to meet diverse user and public expectations, the ability to find and retain strong talent, and to achieve all of this on a minimal budget, has left E-Comm in a position of financial and technological deficit and with a credibility gap with its stakeholders. While some aspects of the organization have evolved and scaled with this growth trajectory, E-Comm's governance framework has remained somewhat stagnant and is constantly challenged to provide effective oversight and accountability.

However, despite these concerns, E-Comm continues to meet and exceed its core 9-1-1 call answer performance metrics and remains well placed to continue to be the cornerstone of the emergency response system for BC into the future. Several critical changes need to be made to E-Comm's governance framework including in its stakeholder engagement and its operational and financial oversight. There is an opportunity to remove inequities in the shareholder class structure and representation processes, creating opportunities to reduce the disproportionate cost members will continue to bear, while improving the quality of service and information they receive. While these changes may seem relatively intuitive, to-date, E-Comm has not fully implemented them due to management's significant workload to maintain a high level of operational responsiveness and to implement the more critical infrastructure, technology, human resource, and operational transformations that are required. The success of this governance transformation will depend on creating a strong Board oversight mechanism while providing management with the appropriate support and resources to elevate them out of their current reactive mode.

Our key recommendations include the following (without consideration of dependencies and therefore not listed in the order of implementation timeline). This will initially require extensive member communications and engagement in order to formulate and align around the specifics of the implementation plans, activities and timelines:

- 1) Implement a new governance structure (including a streamlined Board).
- 2) Refine the use of representative service governance bodies, such as User and Service Committees with member appointed representatives. The committees should have broadly understood Terms of Reference and serve to enhance user representation in the governance structure.
- 3) Propose revisions to Board and Management Committees to support enhanced decision-making and oversight.
- 4) Create a member Nominating or Screening Committee to identify and approve new director candidates for the Board.
- 5) Enfranchise all users regardless of regional geography by making them members (rather than the current state in which only radio users are Class A members).
- 6) Seek Board, member and Ministerial approvals, as required, of proposed changes to the governance structure and Articles/Members' Agreement.
- 7) Refine the Board agenda, cycle, materials, procedures, and policies, including a formal Delegation of Authorities.
- 8) Redesign the operating cost/budgeting model to provide greater equity and transparency while reducing the perception that the cost allocation process is not equitable.
- 9) Develop a streamlined service delivery and pricing process to drive stronger economies of scale and efficiency in the governance, pricing, and service delivery processes.
- 10) Develop investment funding and operating cost forecasting strategies to provide greater clarity of future costs and remove unexpected fluctuations from the pricing/funding models.

Although E-Comm is only one organization in the provincial emergency response ecosystem, it is a prominent one. There is a significant risk to public safety if E-Comm does not address its current trajectory through this governance review. Time is of the essence in continuing to strengthen E-Comm's governance and oversight.

2. Introduction and Context

2.1. Purpose of this Document

The Board of Directors and Executive team of E-Comm want to enhance the governance, oversight, and decision-making framework for the organization. The Board also wants to address E-Comm’s financial deficit and inherent challenges in the existing funding model as part of organization’s governance maturity. E-Comm is a vital public safety communications corporation serving the diverse communities of British Columbia by providing critical emergency communications services. Since its inception in 1997, E-Comm has evolved from a member-based Lower Mainland radio network provider to a complex, multi-location radio and telecommunications provider, serving more than 30 municipalities and 70 emergency response organizations. E-Comm engaged Deloitte in October 2023 to perform this governance review in response to the evolving complexities and challenges E-Comm faces in serving its key stakeholders. This report provides our observations, recommendations, and conclusions to support E-Comm in maturing its governance framework to be more robust, efficient, and transparent and to enhance E-Comm’s ability to meet its public safety mandate and mission to, “Deliver exceptional emergency communications to the public and first responders that help save lives and protect property.”¹

2.2. Overall Approach

In this review of E-Comm’s corporate governance and funding framework, Deloitte gathered information regarding current practices, assessed key stakeholder perspectives, identified recommendations for improving the future state corporate governance framework, and ultimately tries to align the perspectives of external stakeholders, directors, members, and management.

The key principles for the methodology we used in this review are as follows:

- a) **Identify Guiding Principles for a strong governance framework.** Fundamentally, any changes to E-Comm’s governance structure must be consistent with its values and principles. In essence, E-Comm’s values must guide Deloitte’s recommendations for any proposed future state governance model.
- b) **Understand the Current State.** A strong understanding of the challenges, frustrations and opportunities in the current state operating environment provides the baseline for those areas where change must be prioritized over activities that are considered strong and therefore maintained in any future state model.
- c) **Identify key attributes of a Future State governance model.** To validate which governance activities should be prioritized and implemented, we identified several attributes against which potential corporate structure, governance structure, delegations of authority, and funding model options could be assessed. These allowed us to translate the guiding principles for the future state model into specific evaluation criteria against which we assessed the options available to E-Comm and its members.
- d) **Prioritize implementation activities.** Improving the overall governance structure of E-Comm will be a multi-year journey with foundational steps for E-Comm to take in the short-term on which to build for longer-term measures. We have provided an implementation plan and timeline as a roadmap for E-Comm and its members to move this work forward.

2.3. Key Methodologies Employed

We employed the following methodologies in this review:

¹ [Our Mission | 9-1-1 Emergency Dispatcher | 9-1-1 Emergency Dispatch \(ecomm911.ca\)](#)

Stakeholder Interviews

Deloitte conducted over 40 independent in-depth interviews with over 80 key external and internal stakeholders. These stakeholders included local government officials, police, fire, ambulance representatives, directors, E-Comm's CEO and members of the Executive team. This approach allowed for a systematic analysis of the issues, concerns and opportunities raised by stakeholders. Deloitte aggregated the information gathered into themes about the challenges facing the organization today, the requirements for a future state governance and funding model, and recommendations to advance this mandate.

Documentation Review

Deloitte reviewed a significant number of documents. Within E-Comm we reviewed documents regarding the current state of the organization, transformation projects and financial models including presentations and proposals to the Board. We also reviewed and considered documents external to E-Comm including industry-specific materials to determine industry leading practices and initiatives; as well as recent research and relevant studies in areas such as the role of local governments, governance structures for similar organizations, funding models, and call answer levies, among other things.

Jurisdictional Scan

Deloitte investigated the structures and operations of similar organizations in other jurisdictions (across Canada, as well as some comparable American and international jurisdictions) to understand the broader context and maturity of a variety of emergency communications organizations' corporate governance practices, operating models, regulations, and leading practices. Internationally, due to geographic, demographic, and regulatory similarities, the Netherlands C2000 system, Spark NZ (and New Zealand Police Force), and Danish Police (Politi) proved to be insightful comparators. By examining these governance landscapes, Deloitte was able to gain valuable insights into potential areas of opportunity and improvement.

Funding Model Analysis

In parallel with the stakeholder interviews, Deloitte engaged in discussions focused on understanding the dynamics and constraints of the current funding model with stakeholders, E-Comm's Executive and Finance & Accounting personnel. Deloitte assessed information on funding sources, capital expenditure forecasting, revenue and operating cost budgets, rates and levies, and service charge models. Our review also included discussions about future potential funding sources and the implications of significant anticipated costs, such as the integration of new regions and customers, and major transformation projects (including NG9-1-1).

GPAC and Board Engagement

Deloitte shared the initial key themes, including the current challenges facing E-Comm, as well as attributes for a successful future state model, with E-Comm's Governance & Public Affairs Committee (GPAC) and the Board in several sessions. This included a workshop-style steering committee session to gather insights and feedback from GPAC and other directors on key challenges and preliminary options for the organization going forward. This provided an opportunity to hear any immediate feedback and concerns or potential hurdles in moving forward.

Overall, this approach allowed Deloitte to gain a comprehensive understanding of the feasibility of, and receptiveness to, the themes coming from the stakeholder engagement processes as well as potential models being assessed. By combining the findings and analysis from the jurisdictional scan, documentation review, stakeholder interviews, funding model analysis, and other discussions, Deloitte has been able to develop pragmatic recommendations for improving E-Comm's corporate structure, board effectiveness, and funding model. The methodologies employed in the review ensure recommendations are evidence-based and tailored to the specific needs and challenges identified by key stakeholders.

The remainder of this document will consider the governance, funding and decision-making challenges faced by E-Comm, explore potential solutions, and propose a pathway forward that aligns the interests of E-Comm, its stakeholders including its members, and the public it serves.

3. Background

3.1. History

E-Comm is an emergency communications operation established in Vancouver, BC. Following the 1994 Vancouver hockey riots, local governments recognized the need for an effective integrated emergency communications network across the Lower Mainland. In 1997, E-Comm was incorporated under the *BC Business Corporations Act*, designated as an emergency communications corporation under the *Emergency Communications Corporations Act*, and given a mandate.

E-Comm's purpose was to provide emergency communications and related services to its members. It developed and implemented a wide area radio network - the largest multi-jurisdictional, tri-service emergency radio system in the province. This radio system provides a common platform for emergency services personnel (police, fire, ambulance, and transit police) to communicate with each other across jurisdictions and agencies during emergencies. The various local governments and public safety agencies initially served by E-Comm are its original members - predominantly local governments but also other key stakeholders such as police boards, BC Emergency Health Services, and the South Coast British Columbia Transit Authority. These radio network users comprise the members (collectively the Class A and Class B members or shareholders) who are bound by the terms and conditions of the Members' Agreement, or, in the case of the Royal Canadian Mounted Police (RCMP), a Special Users Agreement. Radio users have access to the network. Specific contracts govern the balance of the services that E-Comm delivers to its users. The *Emergency Communications Corporations Act* stipulates at section 7 that E-Comm's members must pay all rates for operating expenses and capital expenses assessed by E-Comm.

3.2. Operational Coverage

The current services provided by E-Comm cover seven (7) core business lines:

- 1) **9-1-1 Call Taking/** Primary Public Safety Access Point (**primary PSAP**), comprising ~7.5% of total annual revenue;
- 2) **Police Communication Operations (PCO)**, comprising ~50% of total annual revenue, which is made up of:
 - a. emergency call taking/Secondary Public Safety Access Point (secondary PSAP)
 - b. non-emergency call taking; and
 - c. dispatch
- 3) **Fire Communications Operations (FCO)**, comprising ~5% of total annual revenue, which is made up of:
 - a. emergency call taking/Secondary Public Safety Access Point (secondary PSAP)
 - b. non-emergency call taking; and
 - c. dispatch.
- 4) **Fire Technology Services**, which comprises:
 - a. computer-aided dispatch (CAD)
 - b. records management systems (RMS); and
 - c. technology services; and
- 5) Wide Area **Radio** Network Services, comprising ~25% of total annual revenue;
- 6) HealthLink BC Technology Services;
- 7) PRIMECorp (a subsidiary formed to provide police records' management services).

Over the past 25 years, E-Comm has significantly evolved to include a more robust emergency wide area radio network for the Lower Mainland and expanded its Police and Fire Communication Operations to 33 police agencies and 40 fire agencies, supported by over 700 E-Comm staff members working out of two main operations facilities (Vancouver and Saanich) and two business support locations in Burnaby.

Approximately half of E-Comm's revenue is generated from its Police Communication Operations (PCO) (made up of emergency call taking/secondary PSAP, non-emergency call taking, and dispatch services),

and engages two-thirds of E-Comm’s staff. Radio services generate approximately 25%, 9-1-1 call taking approximately 7.5% and Fire Communications Operations (FCO) approximately 5% of E-Comm’s total annual revenue.

E-Comm’s two operations facilities are purpose-built sites. Both buildings are designed to withstand an earthquake and operate self-sufficiently for up to 72 hours following a disaster. Having two operations facilities offers some physical-site redundancy but does not adequately support full operational backup (as each location, individually, would struggle to handle the emergency call volume regularly handled across both sites).

Annually British Columbians make over 2 million 9-1-1 calls (2.3M in 2023), of which 99% are answered by E-Comm, by far the largest primary Public Safety Answering Point² in BC. E-Comm’s target service level as a primary PSAP for 9-1-1 response is for 95% of calls to be answered in 5 seconds or less. In recent years, E-Comm has met this response time target at levels exceeding 98% (with the notable exception of the 2021 ‘heat dome’ emergency call surge).

Of all calls to 9-1-1, approximately 65% are for police, 30% for ambulance and 5% for fire departments. Of the 65% of calls for police and 5% for fire, E-Comm acts as both primary and secondary PSAP for about half of those calls. The other calls, for which E-Comm does not provide secondary PSAP services, are transferred by E-Comm as the primary PSAP to other non-E-Comm secondary PSAPs.

There are currently 14 Emergency Communication Centers or sites, including the two (Vancouver and Saanich) that are operated by E-Comm, in British Columbia. The other 12 sites are comprised of nine police PSAPs and three sites managed by BC Emergency Health Services (BCEHS). Calls for ambulance are always transferred by E-Comm as primary PSAP to the BC Emergency Health Services, who operate three emergency communication centers or sites that are virtually integrated into a single secondary PSAP for emergency medical calls.

Police Communication Operations

The *Police Act* delineates the responsibilities of Provincial and local governments for providing policing services. Therefore, local governments can decide how they fulfill their mandate under the *Police Act*. In terms of police communication operations, there are three modes by which local governments can provide 9-1-1 calls (primary PSA) and secondary PSAP services:

- (1) by contracting for those services from E-Comm;
- (2) by using the RCMP Provincial Police Service for secondary PSAP services, or
- (3) by providing secondary PSAP services for themselves.

There are currently nine police Emergency Communication Centers (ECCs) or sites in addition to E-Comm’s two facilities in British Columbia. The non-E-Comm ECCs are:

- | | |
|--------------------------------------|-------------------|
| 1. Courtenay (RCMP) | 6. Surrey (RCMP) |
| 2. Green Timbers - Chilliwack (RCMP) | 7. Langley (RCMP) |
| 3. Prince George (RCMP) | 8. Transit Police |
| 4. Kelowna (RCMP) | 9. Nelson Police |
| 5. Coquitlam (RCMP) | |

² A primary PSAP is an emergency communications centre that initially answers a 9-1-1 call and is the first point of contact for a caller. When someone calls 9-1-1, that call is routed by the telco directly to the primary PSAP to determine the caller’s need (police, fire, or ambulance) and location (city). The caller is then connected with a secondary PSAP emergency call-taker who assesses the situation by gathering relevant information and determines the appropriate response. Primary PSAPs connect the caller to secondary PSAPs. The secondary PSAP completes the call taking process and transfers requests to the proper dispatcher to dispatch the appropriate first responder service agency (police, fire, ambulance).

A more detailed flow for police emergency communications, for example, is outlined in the diagram below.

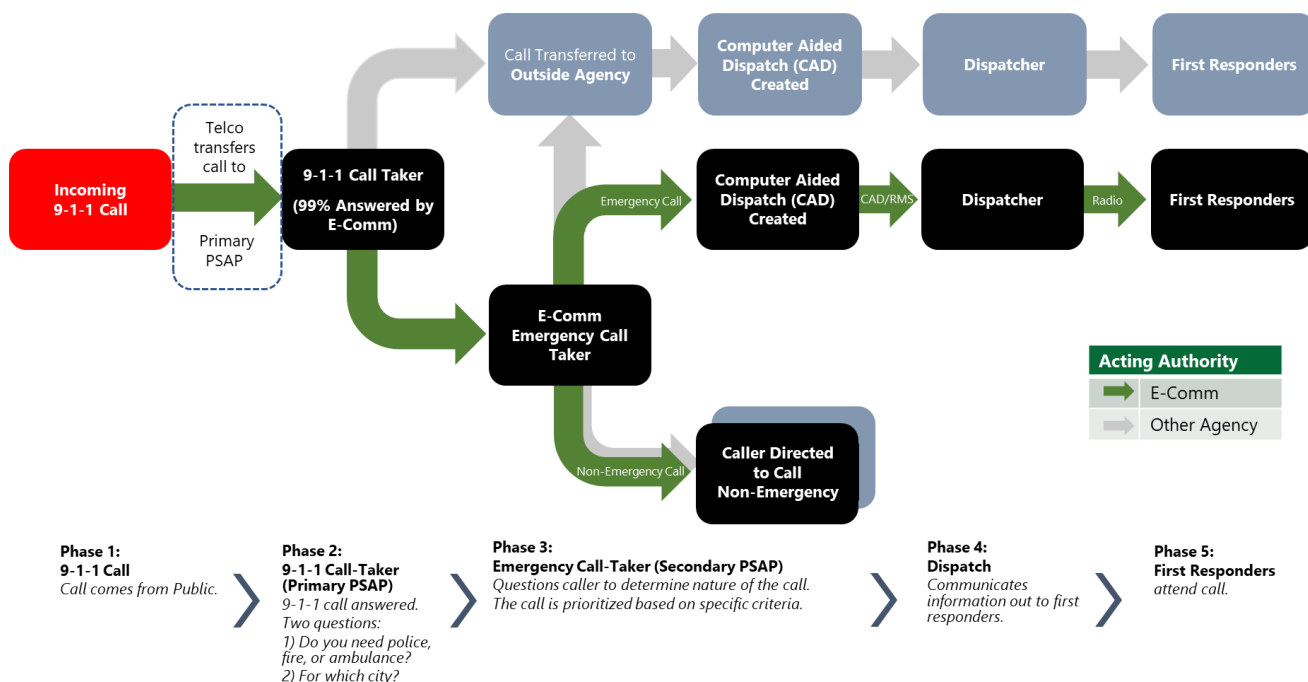


Diagram 1: Overview of the communications flow for a typical 9-1-1 call

Wide Area Radio Network Services

Radio services are delivered under a single radio levy to E-Comm’s 26 Class A members/shareholders³. These radio users have Class A shares equivalent to the number of E-Comm’s radio network services (police, fire, ambulance, municipal) they use. The 26 Class A members hold among them 37 Class A shares as some members subscribe to more than one radio network service (e.g., Coquitlam uses E-Comm’s radio services for both fire and police and holds two Class A shares).

E-Comm only provides radio services across the Lower Mainland. The radio levy that E-Comm charges to its radio users (i.e., its Class A members) includes:

- 1) Rates based on radio infrastructure costs (e.g., antennae on buildings, or diesel generators);
- 2) Rates based on maintenance/management of the radio infrastructure; and
- 3) Amortized equipment/hardware costs (e.g., radios and consoles for agencies)

3.3. Current Jurisdictional Responsibilities

For its non-radio lines of business, E-Comm operates within a matrix of federal, provincial, and local governments and government agencies in Canada, each with important roles in maintaining overall public safety.

Federal:

At the national level, the Canadian Radio-television and Telecommunications Commission (CRTC), as the federal body responsible for regulating telecommunications companies, plays a significant role in public

³ See Appendix A – Shareholder Structure for a listing of all Class A and B members/shareholders.

safety as 9-1-1 calls are made using telecommunications network infrastructure. Telecommunications companies (telcos) route those calls to the primary PSAP servicing the caller's region (e.g., E-Comm).

The CRTC has mandated that Next-Generation 9-1-1 (NG9-1-1) systems be implemented by 2025 by all Canadian telecommunications companies and all primary and secondary PSAPs. NG9-1-1 technologies will eventually allow callers to transmit text messages, images, video, and data to primary-PSAP/9-1-1 call takers and will allow those call takers to similarly use digital communications to downstream that information to secondary-PSAPs/emergency call takers and first responders. Although this transformation will come at a significant cost, it marks a big step forward in the evolution of emergency communications and is expected to materially enhance public safety across Canada.

The federal government is also involved in policing and other related enforcement and emergency response areas. Federal agencies, such as the Royal Canadian Mounted Police (RCMP), are responsible for enforcing certain laws and conducting investigations that span across provincial and international borders.

Importantly, BC has a Provincial Police Service Agreement with the Government of Canada, which makes the RCMP BC's provincial police force. The RCMP in BC is called E-Division. One of the responsibilities of E-Division is detachment policing, which, under the *Police Act*, serves: municipalities in BC with populations <5,000 and unincorporated areas; and municipalities who enter into agreements to engage the RCMP (as the provincial police force) to act as the municipal police department in their municipalities. By way of example, the City of Langley and Coquitlam contract for policing services delivered by the RCMP. When those services are delivered by the RCMP, they fall under federal jurisdiction, which may result in operational differences, such as the application of federal versus provincial privacy laws and federal procurement obligations.

Other federal bodies involved in public safety include Public Safety Canada, which coordinates federal efforts for national security and the safety of Canadians and other federal departments who have interests in emergency preparedness, operations infrastructure. Additionally, Innovation, Science and Economic Development Canada is responsible for ensuring the radio spectrum is available for first responders.

Provincial:

At the provincial level, the Ministry of Public Safety and Solicitor General (PSSG) is responsible for overseeing policing and ensuring an adequate and effective level of law enforcement in British Columbia. PSSG is also responsible for the *Emergency Communication Corporations Act (ECC Act)*, which provides a high level of regulation to E-Comm as well as CREST (the emergency radio services provider in the South Island region). Among the powers of the Ministry in the *ECC Act* is the requirement to approve any changes to E-Comm Members' Agreement before they can come into effect, including structural and governance changes.

The Province does not systematically and continuously fund 9-1-1 or emergency call handling in BC, but has provided one-time funding on certain occasions, most notably a \$150M commitment for the implementation of NG9-1-1 technology in BC.

Other notable provincial ministries engaged in E-Comm's work are the Ministry of Citizens Services (which is responsible for extending communication connectivity in northern and remote BC areas), and the Ministry of Health (MoH), which is responsible for BCEHS. The MoH oversees the delivery of healthcare services in the province, which includes emergency medical services.

In particular, mental health services are increasingly being discussed as a possible addition (a fourth option) to the existing emergency call answer service framework of police, fire and ambulance services but does not presently exist. Calls relating to mental health and addictions have been escalating, creating significant complexity for E-Comm's dispatch and police dispatch services. Mental health professionals are increasingly collaborating with first responders to provide their specialized skills to support these types of calls. Increased call numbers related to substance abuse and mental health will continue to put service pressures on E-Comm. BCEHS plays a critical role at the intersection of first responders and the critical information BCEHS receives from E-Comm to provide to those responding to these calls. In addition, The

BC Mental Health Support Line is currently a separate phone number supported by the provincial government.

Local Government:

At the regional and municipal levels, local governments in British Columbia are responsible for providing public safety and emergency services to their residents (under such legislation as the *Police Act*). Municipalities are responsible for the provision of local law enforcement as a critical component of the emergency and public safety system. Municipalities can offer secondary PSAP/emergency call answer and dispatch services themselves or procure these services from third parties, including E-Comm and the RCMP, many municipalities have chosen to obtain these services from E-Comm. Reasons for this may include the criticality and the 24/7 nature of the service requirement, the challenge of attracting, training, and retaining experienced call-takers, the requirement for significant investments in technology, and the overall economies of scale that can be achieved through a consolidated service delivery model.

As discussed above, a number of these local government and emergency response agencies are also members of E-Comm, providing a further layer of governance and stakeholder engagement. This layered governance structure can be illustrated as follows.

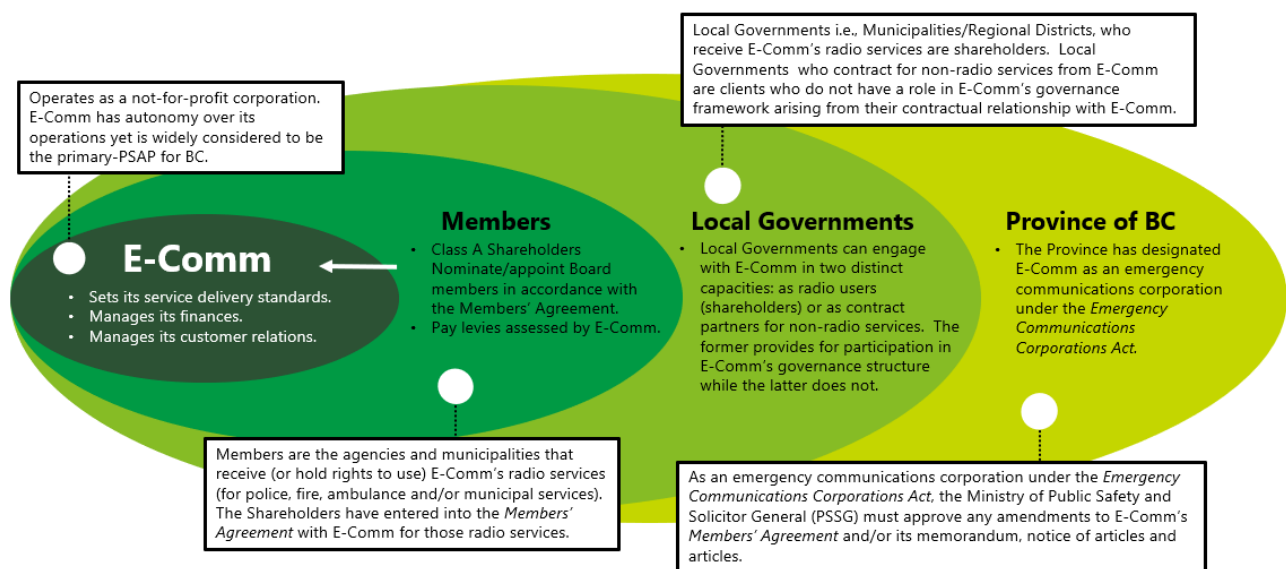


Diagram 2: How E-Comm fits into the BC emergency communications landscape.

3.4. Transformation of E-Comm

E-Comm has commenced a multi-year program to transform its core service delivery, operating model and supporting systems to streamline operations, improve service quality and to ready the organization for the next generation of digital and artificial intelligence (AI) technologies. Significant drivers for this effort include the need to automate cumbersome manual processes; upgrade legacy software; consolidate more than 1,500 standard operation procedures (SOPs) developed with partners (as they historically dictated the procedures that they wanted E-Comm to follow for their services); to improve the stability and transparency of levies, rates and pricing information; and to prepare for the implementation of NG9-1-1 systems. There are five core pillars to the ongoing transformation strategy: (1) Operations, (2) People & Culture, (3) Governance & Stakeholders, (4) Corporate Foundation and (5) NG9-1-1.

NG9-1-1 will bring the following capabilities. These will enhance both public safety and safety for first responders. However, these capabilities will also add complexity for E-Comm in relation to its service delivery, technology, security, privacy, governance, and operations.

- **Multimedia transmission:** In addition to voice calls, NG9-1-1 will allow for text messages, photos, videos, and other forms of multimedia. Callers will be able to convey crucial information to emergency responders more efficiently and comprehensively. NG9-1-1 systems are based on IP networks, which allow for more efficient routing of emergency calls and data. It would also enable the integration of additional services and applications, such as real-time translation services or medical device monitoring.
- **Location Accuracy:** This technology will allow for more precise location information for emergency calls, including indoor location tracking (e.g., what floor a person is on in a high-rise building). This is particularly important for situations where the caller is unable to provide their location, is in a remote area, or in some Indigenous communities.
- **Connectivity with Other Systems:** Enhanced systems will be able to integrate with other emergency response systems (police, fire, and medical systems). This will facilitate better coordination and enhance emergency response. This would also include advanced call routing systems.
- **Accessibility Features:** This will assist individuals with disabilities to better access emergency services. This may include support for text-to-speech and speech-to-text technologies.
- **Resilience and Redundancy:** In the event of network outages or other disruptions, these technologies would help to minimize downtime and ensure that emergency services remain available when needed.

3.5. Jurisdictional Scan

A key part of our review was to investigate the governance, funding, and operational models in place in other jurisdictions for the operation of PSAPs and emergency radio network communications services, particularly across Canada.

Our review concluded that there are several differences in the way the PSAPs are operated across Canada and the US. For the most part, provincial and state governments are responsible for providing emergency services and play a critical oversight and coordination role across emergency services, including PSAPs. The operation of PSAPs, dispatch and emergency response are often the purview of local governments, as is the case in BC.

When considering future state governance opportunities for E-Comm, we grouped our observations about notable differences and opportunities for E-Comm, under four key areas. These are:

- 1) legal responsibility for PSAPs;
- 2) legal structure of PSAPs;
- 3) funding for PSAPs; and
- 4) for the shared radio network - management of shared emergency radio network services.

1) Legal Responsibility for PSAPs

In most jurisdictions, the responsibility for providing emergency services ultimately lies with the provincial or state government. Local governments are typically responsible for providing PSAPs for their communities (including in Alberta, Quebec, Ontario, and British Columbia).

In one case, Newfoundland has placed the responsibility for operating a PSAP in a not-for-profit organization that serves the entire province.

Provincial governments have not established call answer standards (most voluntarily adopt the National Emergency Number Association (NENA) minimum standard of answering 90% of all 9-1-1 calls within 15 seconds). Ontario's independent Ombudsman has recommend implementing a provincial oversight body following a series of fatalities linked to call answer and response delays in ambulance dispatch in 2018 and again in 2021.

2) Legal Structure of PSAPs (Primary and Secondary)

Some PSAPs are operated as crown corporations (e.g., SaskTel is the operator in Saskatchewan). Other provinces, including British Columbia, include private corporations as part of the public safety system, for example Northern911, as a division of Northern Communications Inc., in Ontario and CommAlert in Alberta. Additionally, the RCMP operates PSAPs at the local government level, but this results in fragmentation, with those PSAPs servicing only individual regions without the benefit of economies of scale. This also results in multiple independent PSAPs across Alberta and over 100 PSAPs operating in Ontario.

The Province of Newfoundland operates NL911 as a not-for-profit PSAP. It is like E-Comm in that NL911 has two facilities for Newfoundland and Labrador providing a similar level of redundancy as E-Comm with its two operational facilities in Vancouver and Saanich.

3) Funding for PSAPs

Eight provinces/territories across Canada⁴ have a wireless (cellphone) call-answer levy administered by the primary telecommunication company in the province, which provides a stable source of funding to support the operating and capital expenses of the PSAPs in those provinces. In provinces where local governments are responsible for providing PSAPs, funding often comes from municipal property taxes or call answer levies (as is the case in BC with landline levies). Most provinces provide grants and special purpose funding, particularly for large capital expenditures such as infrastructure investment and assistance with technological upgrades (e.g., NG9-1-1).

4) Management of Shared Emergency Radio Network Services

It is common to have shared radio network services in any given province. The key benefits of tri-service (police, fire and ambulance) networks are continuity and interconnection of emergency response communications.

BC has, thus far, provided the authority to operate emergency communications services to two corporations: E-Comm and CREST (Capital Regional Emergency Service Telecommunications) and retains the ability to designate other emergency communications corporations under the *Emergency Communications Corporation Act*. Other provinces, such as Ontario and Saskatchewan, operate shared provincial emergency radio networks through provincial agencies in partnership with the RCMP or other public safety agencies.

The federal and provincial governments are watching this space as technologies continue to evolve to ensure interoperability amongst first responder services. For example, the federal government is driving for a national public safety broadband network (PSBN), which is a secure, high-speed, mobile wireless communications network that will allow seamless interoperability between first responders across regions and with the American system. Other technologies, such as low earth orbital satellites (LEOs) will also become more prominent in these discussions. E-Comm's governance and technology structures will have to evolve to remain current with these changes.

Beyond North America, we identified several relevant governance models that E-Comm, and BC in general, could benefit from emulating. These include the Netherlands and New Zealand – both operating very efficient, effective, and resilient emergency radio communication networks. Although it should be noted they do benefit from having a consolidated national police force and other emergency response organizations, far different from the fragmented decentralized environment in which E-Comm and its peers across Canada operate.

⁴ Provinces/territories in Canada (and their respective monthly cellphone levy amounts) are as follows: Alberta (\$0.95), New Brunswick (\$0.97), Newfoundland and Labrador (\$0.75), Northwest Territories (\$1.70), Nova Scotia (\$0.43), Prince Edward Island (\$0.70), Quebec (\$0.52), and Saskatchewan (\$2.08).

Several relevant observations and opportunities arising from this jurisdictional scan have been incorporated in the balance of this review.

4. Guiding Principles

For assessing the current state of E-Comm’s governance framework as well as considering its future state, Deloitte developed several guiding principles through discussion with stakeholders and leveraging industry leading governance practices. These guiding principles form the basis of the recommendations made in this report and should feature centrally in any future governance framework and its supporting decision-making, funding and service delivery models.

Objective	What this means for E-Comm’s governance framework:
Public Safety	Oversight of management’s execution of strategy and open discussions about risks, conflicts, and mitigating actions, particularly where there is a potential impact to public safety, is an overriding principle for the success of the organization. The corporate strategy, and all investments, should directly engage this principle, and risks to the strategy and public safety should be surfaced to the Board in a timely manner. Given the interdependencies across the emergency response system, mechanisms should exist to allow input and involvement in E-Comm’s key decisions from user and other stakeholder groups.
Clear Accountability	It is paramount that the governance framework supports the long-term strategy and sustainability of the organization while encouraging innovation and evolution of the service delivery model. The role and presence of independent directors on the Boards is fundamental, as is the requirement for the Board to be objective and independent of management. The directors are the stewards of E-Comm, exercising independent judgement in supervising management and safeguarding the interests of its members and key stakeholders. They must be appropriately educated and informed about to the business model and operations and hold management accountable for strategic metrics, actions, and decisions. The governance framework must be clear with respect to the reporting relationships, role and responsibilities of E-Comm’s Board, management, and their various committees.
Transparency	As a critical constituent in the public safety system, E-Comm should operate in a highly transparent manner. Service delivery standards and performance metrics should be clearly communicated. Key decisions and actions should be informed by sound principles and data, as should financial forecasts, funding requirements and pricing models. Communication to the public, governments, public safety agencies and other stakeholders should be clear and accessible.
Fairness	The governance structure, funding model, service delivery costing and pricing, and overall operating model should be fair and equitable to all members and users. E-Comm’s decisions and actions should follow a utilitarian approach, favoring the ability to enhance public safety broadly over the preferences of any individual stakeholder group.

Sustainability	E-Comm is a critical service and needs to be both scalable and sustainable. Its governance framework and decision-making processes need to anticipate expected and unexpected changes in the climate and the economic, technological, and social environments in which E-Comm operates. E-Comm needs to be cost-efficient, aligned with stakeholder needs, and scalable into the future.
Employee Motivation	The governance framework should optimize E-Comm’s use of its human resources to achieve objectives, while recognizing that E-Comm’s employees are critical to public safety and the success and long-term viability of the organization.
Efficiency of Decision making	A key objective for the governance framework is to enhance board and management effectiveness and efficiency. Efficiency, simplicity and direct flow of decisions up and down the organization should be major considerations in determining appropriate decision-making roles and responsibilities and allocation of work. Although fiduciary responsibilities will drive many Board decisions, committee work, and effective delineation of management and the Board’s roles, should enhance oversight. The appropriate delegation of responsibilities, based on level in the organization, competencies, skill and efficiency, is critical. Similarly, eliminating unnecessary complexity, redundancy in information flows, and iterative decision-making are key design principles.
Defensibility	Beyond the efficiency of decision-making, a critical attribute of a governance framework within E-Comm is the effectiveness of the process. Decisions made by management and the Board must be accurate, reasonable, evidence-based, and legally defensible, particularly as they relate to regulatory compliance and contractual obligations. Key operational and financial decisions must be readily supportable, have strong risk mitigation mechanisms and be easily explainable to all key stakeholders.

These guiding principles have been applied as key evaluation criteria in our analysis and recommendations for the future state governance structure for E-Comm.

5. E-Comm - Current State Analysis

In considering the guiding principles for an enhanced future state governance structure (as outlined in the prior section), it was clear from Deloitte’s discussions with users, shareholders, directors, management, and other stakeholders that most of these guiding principles are not being fully followed today. Despite these challenges, Deloitte notes that E-Comm continues to meet higher than expected call answer response times, maintains strong working relationships and communications with emergency service agencies, and provides a meaningful working environment for its people – which are the cornerstones of a strong public safety organization. However, Deloitte’s analysis is that the current state is not sustainable and is at risk of being unable to meeting public safety requirements in the future (two key governance principles identified above).

Although there are several root causes or drivers for these concerns, the key current state governance challenges facing E-Comm can be grouped into five categories:

1. Corporate structure
2. Oversight and accountability
3. Financial sustainability
4. Stakeholder engagement
5. Operating and decision-making efficiency and effectiveness.

Some of the key concerns or challenges identified in the current governance framework and operating model relating to the above themes, as well as the potential opportunities they present, are as follows:

5.1. Corporate structure

- a) Legal structure.** E-Comm as an organization, has evolved significantly from its original purpose, intent, and operating model. The organization was incorporated under the *BC Business Corporations Act* and essentially had a member-based model for establishing and operating the emergency wide area radio network for the Lower Mainland. Some key corporate features including reporting, tax treatment, and shareholder structure were varied because of its designation as an emergency communications corporation under the *Emergency Communications Corporation Act*. Additionally, E-Comm operates as a not-for-profit enterprise. This legal structure was appropriate for the original scope of E-Comm's operations to manage a cooperative wide area radio network as intended by its founding members. Over the last 25 years, E-Comm has diversified its business lines, grown in scale and complexity and now has features more akin to a corporation, albeit with a public service mandate and semi-monopolistic tendencies, given its dominant regional coverage.

A pertinent question now is whether there is a more suitable legal structure to better meet the needs of the modern E-Comm to allow it to address some of its governance challenges more effectively and directly. Stakeholders have posed a few different legal structures ranging from maintaining the *status quo* to other possible vehicles such as a not-for-profit society, private corporation, statutory agency, or crown corporation.

- b) Shareholder structure.** Currently E-Comm's share structure has two voting classes. E-Comm has 26 Class A members (holding 37 Class A shares) and 16 Class B members (holding 18 Class B shares). Class A members have rights of access to the radio network as well as significant voting preferences. Class B members have the right for future use of the radio network (essentially, a right to join) and have secondary voting rights. The members (collectively, Class A and Class B members) do not have rights to assets or dividends from any revenue surplus but would bear a *pro rata* share of annual operating costs under the provisions of the Members' Agreement cost sharing formula.

The shareholder structure, voting rights structure and Members' Agreement have not changed to address the additional business lines that E-Comm has expanded into, most notably, primary and secondary PSAP operations (i.e. 9-1-1 call taking and emergency call taking), dispatch, non-emergency call taking and technology services. This has resulted in additional users and stakeholders who are not involved or reflected in E-Comm's governance structure as a result of their business relationships with E-Comm.

Most stakeholders believe the current share structure is inequitable and outmoded. There is an opportunity to revisit the share structure within the governance framework to adjust it to account for the relatively small proportion of the current business that pertain to the radio business (~25% of total annual revenue) and to rebalance it so that it is more equitable amongst E-Comm's many stakeholders. Any changes to E-Comm's shareholder structure must have at least a two-thirds shareholder majority vote and ministerial approval.

5.2. Oversight and accountability

The Board of Directors is currently appointed by Class A members, the Province of BC, and includes five independent Directors. The Board is supported by radio network Service and User Committees. The governance structure is therefore largely representative of the original radio network infrastructure users (i.e., ~25% of E-Comm's revenue) and therefore is imbalanced from a governance perspective when considering the oversight needs of those users contracting for PSAP (primary/9-1-1 and secondary/emergency call taking) and other related services (i.e., the balance of E-Comm's revenue

sources) as well as many other key external stakeholders. The governance oversight structure in E-Comm today can be illustrated as follows:

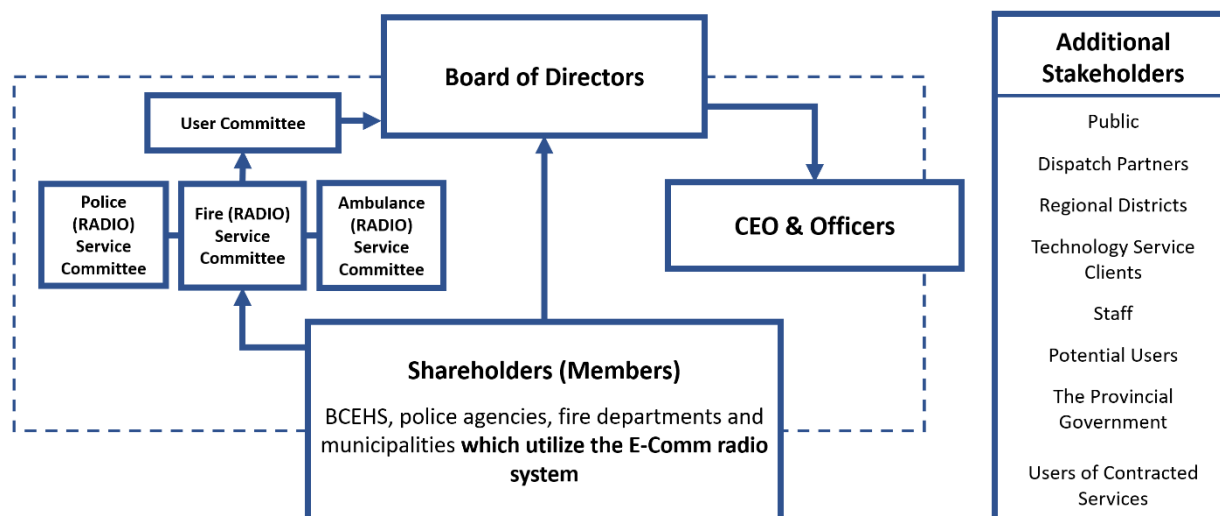


Diagram 3: Current Corporate Governance Structure of E-Comm

- a) Board Oversight.** Despite the recognition of strong guidance and leadership from the Chair, the Board is large (23 directors) and regarded as cumbersome. We heard that the Board does not effectively balance the interests of E-Comm’s various stakeholders. Turnover is high (with an average tenure of two years) making it a challenge to retain institutional knowledge about the rationale and context for recent significant decisions and a steep learning curve for new directors before they can materially contribute to E-Comm’s governance. Directors often have limited experience in the emergency services environment or experience on professional boards, so can struggle at times to understand the complexities of the business model and protocols for related decision making. Of the 23 directors, five are independent and nominated for their skills and experience. The remaining non-independent directors are appointed from member constituencies (and consortia of member constituencies) and sometimes feel pressured to represent the interests of their appointing bodies over bringing a fiduciary perspective to the governance table. Decision-making and oversight challenges at the Board level are thereby exacerbated by the shareholder structure. These challenges all conspire to create a governance model where it can be difficult to provide clear direction and oversight to management, and hold them accountable for their actions and decisions.

Given the complexity and risk faced by E-Comm, there is an opportunity to create a smaller, more stable board comprised of a group of board professionals who would bring an appropriate mix of technical knowledge, experience, and skillsets. The appropriate governance structures and mechanisms would allow for independent oversight and accountability while truly governing the organization to the benefit of the company in a more equitable manner that considers the interest of all stakeholders.

- b) Board and Stakeholder Committees.** E-Comm has three Board standing committees and one task force as follows:
1. Finance Committee;
 2. Governance and Public Affairs Committee;
 3. People and Culture Committee; and
 4. Transformation Oversight Task Force.

Additionally, the Members' Agreement provides for Service Committees for each of the agency groups for radio network users, as follows:

5. Police Service Committee;
6. Fire Service Committee;
7. Ambulance Service Committee; and,
8. Municipal Services Committee (not presently in place).

Each Class A member may appoint a representative to each Service Committee for the Designated Service (radio) which that member subscribes to (i.e., police radio, fire radio, ambulance radio). Currently, the only Designated Service is the radio service. These Service Committees provide advice to management and are accountable to their members and the User Committee. Importantly, summarizing the Members' Agreement, the purpose of the User Committee is to advise management on operational policy, the delivery of (radio) services and the requirements of the users of E-Comm's (radio) services. The User Committee has the responsibility to act in the best interests of all the representative service agencies (police, fire and ambulance). The User Committee is accountable to the Service Committees and has the responsibility to ensure regular and open communications with the Board and the President (CEO). Notably, the Members' Agreement at section 6.2, together with the Terms of Reference for the User Committee, stipulate that the User Committee:

1. Is to, within the financial budgets established by the Board, formulate the Established Standards of Service;
2. Is to provide advice to the Board on the appointment of the President (CEO);
3. Is to review and provide advice to the Board regarding E-Comm's proposed annual operating and capital budgets;
4. Is to review and provide advice to the Board on the establishment of rates assessed to members and any proposed change to the cost sharing formula; and
5. Has the right, on written notice to the Board specifying the issues to be brought before the Board, to require the Chair of the Board to call a meeting of the Board at which the User Committee is represented.

The purpose, authority, influence, and decision-making ability of all these committees have evolved over time and the committees themselves are struggling, in some cases to understand their roles within the governance structure, and to adapt and meet the fast-growing needs of E-Comm. Also, membership of these committees somewhat reflects individual knowledge and experience but does vary due to the inherited inequity, opaqueness, and representation challenges that exist at the broader Board level.

In particular, the roles of the Service and User Committees are not well understood across E-Comm's governance and management groups. There is a meaningful opportunity to use the Service and User Committee structure to greater effect in a revised governance framework. While these committees are meeting and deliberating on matters, they are struggling to provide the right level of strategic, financial, service, and operational oversight required for E-Comm's growing needs. There is an opportunity that comes with any governance review to reconsider the structure, terms and mandates of the committees and their membership.

- c) Government mandates.** While the provincial government, through the Ministry of Public Safety and the Solicitor General, provides overall direction respecting police services in the province and ensures that there are adequate and effective levels of policing, PSAP operations (primary and secondary) are a local government responsibility. While PSAP operations are not strictly a policing function, answering of police related calls is, and the links between those two functions is plain.

Local governments have the responsibility to administer and manage PSAP operations and some emergency response services within their regions. This has contributed to the lack of clear or

consistent service delivery protocols/procedures, metrics, and standards and accountabilities regarding the primary and secondary PSAP and dispatch systems across the entire system in BC. The Union of BC Municipalities has recently called for a provincial mandate and requisite funding from the Provincial government.⁵ The government has responded by providing funding for the NG9-1-1 transition⁶. However, stakeholders have expressed some skepticism regarding the ability of the Provincial government to effectively oversee the delivery of these services (i.e., as a Crown Corporation or a statutory agency) but most interviewees expected the Provincial government to play a larger role in overseeing the players in the ecosystem. There was also an expectation that the Provincial government should directly or indirectly provide funding for emergency communications corporations to support the evolution of a stable and reliable emergency management systems (e.g., stronger operational resilience, NG9-1-1 implementation, and alignment of service delivery across communities).

There is an opportunity for E-Comm to support the Provincial government to clarify service delivery expectations for all stakeholders, as per the UBCM 9-1-1 special resolution, and once financially and operationally stabilized, to support the Provincial government in advancing the quality and availability of emergency communications across BC. With clarity of service delivery standards across the industry, as well as continued funding support, the Provincial government will directly enhance the governance environment in which E-Comm operates, as well as facilitate stronger transparency and operational effectiveness. The Province has stepped in to support the initial funding of NG9-1-1, but there is certainly a greater role for the Provincial government to potentially help E-Comm manage or even consolidate the complexity of the many local government contracts, service level expectations, payment streams, and ongoing implementation and operating costs of a NG9-1-1 call answer environment.

5.3. Financial sustainability

- a) Operating deficits.** E-Comm has been operating in a deficit position for a few years as revenues are not sufficient to cover its costs of growth and operation. The deficit continues to grow year-over-year from a shortfall of \$2.7M in fiscal 2021, to \$5.4M in 2022, and most recently \$7.2M in 2023. This is not a sustainable financial operating model and certainly one that is restricting E-Comm's ability to make required investments in technology, process efficiency and organizational transformation. The root cause of this shortfall relates to a combination of factors: a lack of understanding and appreciation of the actual operating costs and investments that E-Comm requires to sustain and scale its current operating model; a lack of desire by key stakeholders, including members, to contribute more to E-Comm's capital and operating costs until it achieves credible operational and financial stability; a structural historical underinvestment in automation, economies of scale, and drive for global efficiencies.

The *Emergency Communications Corporations Act* provides for the reimbursement of all operating expenses and capital expenditures assessed by E-Comm to the members of the emergency communications corporation. Section 4.7 of Schedule C of the Members' Agreement specifically states that "discrepancies between actual costs and amounts billed in a year (due to differences between budgeted and actual annual costs, or due to a change in User Agency membership over the year) [can be] recovered in the following year" from members. E-Comm is in the process of developing a deficit repayment plan, however, a truly sustainable solution is required to solve the fundamental problem of a lack of sufficient revenue and funding.

⁵ <https://www.ubcm.ca/convention-resolutions/resolutions/resolutions-database/new-provincial-mandate-and-funding-9-1-1-1>

⁶ Current BC government commitment is for \$150M (of which \$60M was distributed to local governments in 2023 through UBCM and \$90M was distributed to E-Comm).

- b) Long term capital investment planning.** E-Comm’s technology and operating infrastructure has been significantly under-invested in for several years and requires significant enhancement to modernize the organization and to move it to an efficient, streamlined provider of critical services. The Board is responsible for approving the annual capital budget (per section 7.4 of the Members’ Agreement), in consultation with the User Committee (per section 6.2.2.2 of the Members’ Agreement), however, beyond the annual capital budget, there has been a lack of effective longer-term capital forecasting, and a lack of clear, transparent and regular reporting on capital investment requirements and funding for the medium-to-long-term to both the Board and the key stakeholders, including E-Comm’s members. In addition, E-Comm does not currently maintain capital reserves for such investments. This heightens the risk and lack of longer-term transparency regarding E-Comm’s ability to effectively fund and manage its infrastructure investments.

Stakeholders do, however, recognize the fact that significant investments are required to support the transformation to a stable operating model, to generate efficiencies and economies of scale, and to implement NG9-1-1 technologies. However, there is currently a lack of clarity as to how future capital requirements will be funded and how much they will cost. There is a strong need for a more transparent longer-term capital investment planning model that appropriately engages the Service and User Committees, as representatives of the service users within E-Comm’s governance structure.

- c) Operational costing and forecasting.** Operational revenues and costs are estimated in the annual budget raised to the User Committee, for review and advice to the Board, as required by s.6.2.2.3 of the Members’ Agreement, and to the Board for approval, as required by Section 7.3 of the Members’ Agreement. The agreement provides that all services must be delivered on a cost-recovery basis, the key elements of which are as follows:

- The Radio cost sharing model is outlined in Schedule C, covering operational and capital costs allocation formulae for radio services. The radio cost allocation model uses a weighted distribution model with coverage area and usage rates the main allocation factors, resulting in a ‘Total Annual Cost,’ which also includes a share of the cost of E-Comm’s corporate overheads.
- Costs of other services, including primary and secondary PSAP, dispatch and non-emergency call taking, are dictated by cost-recovery agreements or contracts with users. The cost allocations differ from agreement to agreement (for example, the dispatch levies for Lower Mainland users follows a different cost model to Vancouver Island users, with differences in how capital expenditures are funded).

A series of unanticipated financial costs has called into question E-Comm’s understanding of its cost base and the ongoing solvency of the current model. There is a concern amongst the key stakeholders, including E-Comm’s members, that E-Comm has historically not understood the true costs of delivering, maintaining, and upgrading the business, while taking on new users over time (not always by choice and often adding to the structural deficit). In addition, stakeholders, including E-Comm’s members, cited significant frustration regarding what they perceive to be management’s lack of transparency and ability to communicate the underlying cost make-up, which results in the user’s invoice for services.

As an example, the original allocation of costs between radio and “Dispatch” customers (a short-hand term often used by E-Comm management to mean most of the non-radio customers, specifically primary and secondary PSAP, dispatch and non-emergency call taking customer) was 30% radio and 70% Dispatch. It was subsequently changed to 40% radio and 60% Dispatch, which remained in place until the end of 2009. In the 2010 annual Board-approved budget, the allocation was adjusted to 65% radio and 35% Dispatch, flipping most of the cost burden onto radio from Dispatch. There has been no change since. The Members’ Agreement states that costs should be reviewed on at least an annual basis and there is nothing preventing E-Comm from reviewing and updating this corporate overhead ratio (or indeed a different method of allocation the costs) on at

least an annual basis. However, this would require a stronger understanding of cost drivers and investment needs than exists today.

- d) Pricing model.** The lack of a detailed understanding of cost drivers, inability to forecast and balance investment requirements, challenges in negotiating equitable user contracts, and inefficiencies in the operating service delivery model have resulted in an inaccurate, opaque, inequitable, and reactive pricing model. Interviewees indicated they did not understand the existing pricing model and were frustrated by the lack of predictability and consistency in the annual levies. There is also a significant concern regarding the inequity in billings, whereby some users are effectively subsidizing others. For example, some interviewees expressed concern that radio customers pay a disproportionate amount for the services they receive and, in practice, are subsidizing non-radio / "Dispatch" customers. This is driven by a combination of the historical cost allocation model (including the inequitable overhead allocation) and by inadequately costing out services for new customers.

By not fairly pricing their services, E-Comm is seen to be creating additional costs and service delivery risks for existing users. Similarly, a reduction in services is likely not to result in any cost reduction (particularly given the current operating deficit). There is a strong desire across all stakeholders for a transparent, predictable, and equitable pricing structure.

5.4. Stakeholder Engagement

- a) Stakeholder credibility.** E-Comm has struggled to maintain credibility and trust with key stakeholders, including members, given recent failures to meet service delivery, performance, communications, and budget expectations. There is significant misalignment across the expectations of key stakeholders, which further amplifies the perceived concerns. There is a consistent perception that management is highly reactive and focused on 'putting out fires' as opposed to building a strategic foundation and significantly enhancing the robustness of systems and processes.

Internally, considerable progress has been made to strengthen the infrastructure and streamline processes, but this is not yet visible to external stakeholders. There remains a significant opportunity to both address the root cause issues (e.g., financial performance, accountability, reporting and other governance issues) and continue to build stronger working relationships with external stakeholders.

- b) User/Member representation.** As discussed above, Section 6 of the Members' Agreement sets out two specific vehicles to represent key users/members: Services Committees and a User Committee. These operate adjacent to the Board and facilitate the representation, interaction, and communication of the interests of these key user/member constituencies to management and the Board, particularly as they make key investment, budgeting and other strategic decisions. Members are responsible for the appointment of designated representatives for each of the Fire, Police, Ambulance and Municipal Services' Committees, who meet to provide advice and instruction on operational impacts on their specific Service (radio), as required by the Committee or the CEO. The User Committee is comprised of the chairs and vice-chairs of each of the Service Committees (police, fire and ambulance) and provides specific advice and instruction on operational policies, standards regarding delivery of services, budgeting and annual capital costs, and rates/cost-sharing formulae. These Committees presently meet on a cycle that tracks the Board meetings. It is not clear how effectively these meetings are being utilized – in effect, the lack of an effective venue for service governance (especially for non-radio customers who are not represented in these Committees) results in users seeking input and representation through their Board appointees.
- c) Customer management.** Existing customer contracts are not consistent or necessarily clear in their service delivery and investment expectations. Many are annual contracts that do not provide sufficient certainty to support investments in infrastructure that are required to meet longer-term

service commitments. There is a lack of account management resources and infrastructure to support customer concerns about service delivery. Challenges in delivering to user expectations are often resolved through direct communications with the executive, often through the member's appointed director.

An opportunity exists to create a more supportive accountable customer relationship management process and account management personnel, although this would come at additional ongoing cost. This could be supported by further clarity regarding performance metrics and reporting on relevant and timely statistics and information (some of which is being provided but possibly not well understood by the user). Additionally, although only the radio service users are represented in the Service committees and the User committee to provide feedback to management and the Board regarding service expectations, there are a number of other committees in place to engage non-radio customers, which could continue to be leveraged or refined.

- d) Executive Communications.** Board presentations are perceived as comprehensive but often overly positive and not always transparent about risks or challenges. Management initiatives are often presented as a *fait accompli*, with an intent to update and seek formal Board approval, rather than educating and bringing the Board along in the decision-making process. The size and structure of the Board certainly does not facilitate efficient debate and discussion, and this may be compounded by perceptions of personal and representative-agenda dynamics.

Regarding user related communications, often the CEO and senior executives are the individuals responding to customer concerns or issues – which, aside from pulling them away from more strategic activities, may challenge their motives or credibility in addressing the concerns. Management is seen as unduly optimistic in their communications. There is a sense of deflecting accountability for current issues through comparisons to other jurisdictions or to transformation progress underway.

There is a need for clarity, transparency, and consistency in communications to the Board and external stakeholders. Management reporting should be balanced and focused on what the Board needs to know versus what management wants to share. Current efforts are underway to address external communications with stakeholders, as these also require clarity and a level of simplification.

- e) Public Education.** Despite increased communications, there is an opportunity to increase both key stakeholder and public education and awareness around the role, structure, and responsibilities of E-Comm as a PSAP within the broader public safety ecosystem. There is a perception that failures in call, telecommunication provider, and agency service responses are attributed to E-Comm. The potential for reputational damage if other agencies are failing to respond in a timely manner increases significantly with shifts in service delivery to secondary PSAPs as well as with the introduction of NG9-1-1 and its associated technologies and complexities.

5.5. Operating and decision-making Effectiveness and Efficiency

- a) Delegation of Authorities.** Decision making with E-Comm largely rests with the Executive team, with the Board approving the most significant decisions – but also often functioning as an informed sounding board. Members could have some input into the approval process through Board committees (User Committee and Police, Fire and Ambulance Service Committees) and other task forces if these were to be created appropriately. In some cases, management committees and external task forces exist to gather input or provide consultation and validation mechanisms. However, the delegation of authority framework is not clearly defined or consistently applied. There is an opportunity with the improvement of the Board oversight model to also address the authorities delegated to the CEO and management, as well as to enhance the engagement of key stakeholders in decision-making processes. This will also serve to release some pressure from users who are

leveraging current board directors or direct communications with the Executive team to achieve certain operational objectives.

- b) Service delivery structure.** Governance in relation to overseeing service delivery is frustrated by the lack of clear contractual terms and metrics, as well as pressure from users to customize service delivery processes, deliverables, resourcing, and other metrics relating to their specific needs. This has resulted in a bespoke service delivery model where each customer often has a unique suite of services, operating under unique call answer operating procedures, and resourced specifically for their needs (which can sometimes result in certain call takers being under-utilized while others are overworked). This eliminates the opportunity for E-Comm to create economies of scale across the regions and agencies they serve, as well as inherently creating increased risk of operating deficits through the combination of inefficient delivery and the need to invest in new technologies to serve the broad user base.

Through the current transformation and streamlining activities, E-Comm has made significant strides in harmonizing and simplifying the number of standard operating procedures (from 1,500 to less than 150) and is considering other opportunities for economies through deploying technology and balancing resourcing needs. Additional gains are likely available through further use of technology, standardized services, consistent service delivery metrics, clarity of responsibilities across the system, and the elimination or transfer out of low value or low revenue services.

- c) Interpretation of the Members' Agreement.** During various interviews and discussions, we heard frustration about limitations that are preventing E-Comm from making certain decisions or implementing specific operational changes. When questioned, the rationale or barrier often cited was restrictions arising from the Members' Agreement, Articles, the *Emergency Communications Corporation Act* or other similar governance documents. Upon further investigation it is apparent that these documents need to be read in concert with one another. Further, in consultation with external legal counsel, we noted that the basis for these beliefs were often not present in the current version of the Members' Agreement. For example, amongst the challenges noted was the inability of E-Comm to raise debt or debentures; to recover operational costs from a departed member; to reduce the number of board members; to seek member approval for longer-term capital investment budgets; questions about the ability to amend the capital cost allocation between radio and dispatch users; amongst others, all of which would, we recognize, require various approvals but can be done. There are sections of the Members' Agreement where further clarity could be introduced, but there seems to be a lack of consistent understanding of the Members' Agreement.
- d) NG9-1-1 Transformation.** There are a considerable number of stakeholders and active parties involved in the successful transition to the NG9-1-1 solutions. In some cases, the responsibility to manage and negotiate these relationships lies outside of E-Comm's control (e.g., telecommunication provider contracts with E-Comm's users, or the implementation timeline of other PSAPs, etc.). Despite good progress and a strong transformation office with E-Comm, there is also a concern amongst some stakeholders that the oversight, accountability, and capability does not exist in E-Comm's governance structure to successfully meet the NG9-1-1 service delivery expectations. As such, there is a no clear indication from the provincial government that it will provide further investment towards the technology environment, without a significant shift of trust in E-Comm's financial management, service delivery, change management and relationship management capabilities.

6. Recommendations - Corporate Structure

6.1. Potential Legal Structures

At present, E-Comm operates as a private corporation under the *BC Business Corporations Act*, with some dispensations and authorities accorded under the *Emergency Communications Corporation Act* that create more features of a not-for-profit membership structure. The question now exists as to whether there is a more appropriate corporate and legal structure that better meets the needs of the modern E-Comm and allows it to address some of its governance challenges more effectively and directly. Our review has identified four potential corporate structures that could be considered going forward. All will meet the guiding principles outlined at the beginning of this report to varying degrees. The advantages and implications of each have been considered below. These models are:

1. Private Corporation
2. Not-for-profit Society
3. Statutory Authority
4. Crown Corporation

Note that changes to the legal structure, membership constituency and shareholder voting classes would require a two-thirds vote majority approval of all members, changes to the Articles (also requiring a two-thirds majority member approval), and approval of the Minister of PSSG. Changing the corporate structure away from the current corporation (options 2-4) will likely also require legislative amendment to the *Emergency Communications Corporation Act*. Certainly, options 3 and 4 will require substantive provincial and regional government engagement.

6.2. Private Corporation (*refined status quo*)

The current corporate legal structure could be maintained and still achieve the governance goals and objectives set out in this report. Some changes could be considered to clarify or specifically allow the creation of investment reserves or recovery of accumulated deficits, for example, but most recommendations in this report could be achieved through Board resolution, management strategy or with amendments to the Members' Agreement.

Advantages:

- a. Allows continued authority for the Board and management to develop and implement a strategy aligned with E-Comm's vision and stakeholder objectives.
- b. Permits surplus revenues to be retained as reserves for future infrastructure investments.
- c. Permits the raising of financing or debt beyond the existing members.

Implications:

- a. Pressure may come from members to distribute surpluses or otherwise retain control over those funds rather than allowing E-Comm to build capital reserves internally.
- b. Changes to Members' Agreements require two-thirds majority member approval.
- c. May not fully address the core governance issues without changes to the Board and delegations of authorities.

6.3. Not-for-profit Society

The creation of the current corporate structure for E-Comm anticipated several attributes of a not-for-profit corporate structure (e.g., members without rights to assets or dividends, taxation relief, etc.). E-Comm could consider moving fully to a not-for-profit model to further simplify these requirements and eliminate any constraints placed by the current shareholder voting structure. This would move oversight and governance fully to the Board (on behalf of the government, members, and customers) and management. The termination of the existing corporation would require two-thirds majority approval of all members, as well as ministerial approval.

Advantages:

- a. Provides full autonomy to the Board and management to develop and implement a strategy aligned with E-Comm’s vision, without government and member oversight.
- b. Permits surplus revenues to be retained as reserves for future infrastructure investments.
- c. May permit the raising of financing or debt.

Implications:

- a. Eliminates the need for shareholders as well as their ability to directly influence E-Comm’s strategy (although the format and rights of shareholders would still need to be considered).
- b. Requires two-thirds majority shareholder approval and ministerial approval.
- c. Requires legislative amendment to the *Emergency Communications Corporation Act*.
- d. May not fully address the core governance issues without changes to the Board and delegations of authorities.
- e. Likely will require additional oversight from regional representation on the Board or other governance council.

6.4. Statutory Authority

The most relevant example of a region-wide statutory authority in BC is TransLink. Under this structure the *Emergency Communications Corporation Act*, or a similar new legislation, would provide E-Comm the authority to operate specified services within specified regions, and provide for the governance, levy model, and other operational needs.

Advantages:

- a. Provides some autonomy to the Board and management to develop and implement a strategy aligned with E-Comm’s vision but with government and regional/mayoral oversight.
- b. May permit surplus revenues to be retained as reserves for future infrastructure investments.
- c. May permit the raising of additional levies (e.g., cellphone), financing or debt.

Implications:

- a. May require a provincial mandate for E-Comm as the primary PSAP or consider the authority of other PSAPs.
- b. Eliminates the need for members as well as their ability to directly influence E-Comm’s strategy.
- c. Requires ministerial approval, provincial engagement, and legislative change.
- d. May not fully address the core governance issues without changes to the Board and delegations of authorities.
- e. Likely will require additional oversight from regional representation on the Board or other governance council, such as a Mayoral Council above the Board.

6.5. Crown Corporation

Several stakeholders were advocating that E-Comm be moved into a Crown Corporation structure. Under this model the government would become the sole shareholder of E-Comm and provide the authority to operate specified services within specified regions, and provide for the governance, levy model, and other operational needs through specific legislation. As with other Crowns, E-Comm would likely report to the Crown Agencies Secretariat (CAS) in the Ministry of Finance and a core ministry, such as PSSG.

Advantages:

- a. Provides some autonomy to the Board and management to develop and implement a strategy aligned with E-Comm’s vision but with direct government accountability and oversight.
- b. May permit surplus revenues to be retained as reserves for future infrastructure investments.
- c. May permit the raising of additional levies (e.g., cellphone), financing or debt.

Implications:

- a. Likely creates a provincial mandate for E-Comm as the main PSAP and removing the authority of other PSAPs.
- b. Will require E-Comm to adopt, resource and invest in key government mandates and policy direction (e.g., Indigenous reconciliation, climate change, rural telecommunications access, etc.).
- c. Will minimize the ability of users to directly influence E-Comm’s strategy.
- d. Requires ministerial approval, provincial engagement, and legislative change.
- e. Government will likely replace the Board, through the Crown Agencies and Board Resourcing Office, (CABRO) and will help define delegations of authorities.
- f. May require surpluses to be redirected to government revenues for other purposes.

6.6. Shareholder Structure

Members of E-Comm, under the terms and definitions of the Members’ Agreement, refers to the Class A and Class B members. The Class A members receive radio network services and, as such, are accorded voting and approval rights over significant strategic, investment or rate changes for those services, while Class B members have a future right to access the radio network but in the interim are appropriately not accorded the voting rights to approve changes to aspects of the radio services.

One challenge this structure poses is that over time E-Comm has expanded its customer base, non-radio business lines, and geographic coverage. This has resulted in a scenario where the rights of members (in particular, radio network members i.e. Class A members/shareholders) provide significant potential advantages over non-members (who contribute ~75% of E-Comm’s revenue) in determining the oversight, governance, funding allocations, and certain decisions and operations of the business. These provisions are defined within the Members’ Agreement – which was also identified in other sections of this report as having some outdated, unwieldy, or inequitable clauses. Similarly, the Class A members carry a disproportionate share of costs (and potentially deficits, debt and other financial risk). This inequity in the governance model was identified as an area of risk and concern by stakeholders interviewed and as such there is an opportunity to collapse and simplify the shareholder structure and the Members’ Agreement.

A potential solution would be to consolidate the shareholders into one class with equal voting rights. The *Emergency Communications Corporation Act* and Members’ Agreement together provide the mechanisms and provisions for management to assign fair and transparent rates or levies to both radio network and non-radio customers – ultimately allowing management to move to a service contract structure where all users are charged a fair fee for the services they subscribe to. Moving to a model of ‘one member, one vote’ will provide stronger and more equitable corporate governance when it comes to selecting Board directors, approving significant changes to the membership model, or approving critical business decisions or changes.

There will be some complexities in implementing this change, specifically:

- amendments to the Articles and Members’ Agreement will need to be reviewed and agreed to by the current members/shareholders.⁷
- the nature of these changes will likely require a 75% approval by the current Class A members and similarly a separate majority vote approval by Class B members.
- ministerial approval will be required before the changes can be enacted.
- Class B members would likely have to voluntarily relinquish their shares in return for the new Class A shares; and,
- Members with multiple shares (e.g., for Police, Fire, Ambulance services) would have to voluntarily relinquish their shares in excess of the one enduring future share.

⁷ Note: The Members’ Agreement (version 4) was last amended in 2021 (and 2010 prior to that) [we are on the 5th restatement which was updated in 2023 to add a 5th independent director.]

There are certain consistent beliefs within management and the Board regarding specific limitations imposed on E-Comm by perceived restrictions in the Members' Agreement. It appears that the basis for these management beliefs was often not present in the Members' Agreement. There are sections of the Members' Agreement where further clarity could be introduced with the above changes, as well as the provision of further interpretation, education, and support for management.

6.7. Summary of Recommendations – Corporate Structure

Based on the analysis above, all four of the potential legal structures would support the direction and vision of E-Comm into the future albeit with differing levels of governance effectiveness. This implies the structure is less of a factor in the future corporate governance model, while shareholder equity, strength of the Board, and stakeholder, especially user/customer, engagement mechanisms would be more critical factors. These can all be achieved through the current model with minimal change. The other three structural options do require significant legislative and corporate change, in some cases requiring considerable public and stakeholder consultation, as well as member and ministerial approval. This would come at considerable cost with minimal incremental benefits. As such, **we would recommend the following:**

1. Maintain the current corporate legal structure.
2. Review and amend the Members' Agreement to address current inconsistencies or opportunities identified in this report (e.g., simplifying the shareholder voting structure; ensuring equity in approval and approval of decisions impacting all members; screening the nomination and approval of new Directors; facilitate the accumulation of capital reserves; etc.).
3. Seek member and ministerial approval for the simplification of the share structure to a common shareholder model whereby all customers are considered equal members.

Develop a guidance document (Frequently Asked Questions) to support management and the Board in their understanding and interpretation of what is possible vs. not permitted under the requirements of the Members' Agreement. This should be updated as new questions and concerns are raised for clarification.

7. Recommendations – Board Governance

There are a few immediate to near-term recommendations that would improve the governance, oversight, and accountability of the Board. Changes to the Board size, nominating process and terms may require amendments to the Members' Agreement and ministerial approval, while other changes are likely within the purview of the Board in its normal decision-making capabilities.

7.1. Board Structure

- a) **Board size.** Section 4.1 of the Members' Agreement and Section 12.1 of the Articles sets the Board size between 3 and 25 persons. Ideally the leading practice for board sizes for similar organizations is approximately 8-10 directors, including the Board Chair. With the appropriate skillsets and experience, this would facilitate effective discussion, debate and decision making.
- b) **Board composition.** The composition of the Board is set out in Section 4.2.6 of the Members' Agreement and includes a requirement for five "Independent Directors" who have an interest or expertise in the Purpose or the Company Services to be provided by the Company. Otherwise, the members are entitled to designate the remaining directors as specifically provided for in the Members' Agreement. This has resulted in the large unwieldy nature of the current Board. Any limits on Board size should also address the composition of independent directors versus government or member appointees. Although directors could all be

independent, they would be required to represent the best interests of E-Comm and its stakeholders, including all members, under their common law fiduciary duties.

- c) **Board term.** Article 13.1 of the Articles requires that all directors retire at the Annual General Meeting and the Members will elect the new Board in accordance with the terms of the Members' Agreement. This has inadvertently resulted in the annual turnover of many directors, limiting their ability to gain the knowledge and experience to provide strong oversight and accountability, as well as creating challenges for on-boarding education. Leading practice would suggest a term of 3-4 years, with the ability to stand for additional terms.
- d) **Board nominations.** Although the Board would use a subcommittee (e.g., Governance and Public Affairs Committee) to identify a pipeline of prospective directors and present them for member approval, E-Comm could consider creating a nominating or screening committee of members to facilitate the identification and appointment of suitable candidates and as a mechanism for member engagement. This is a practice employed by other organizations and government agencies (e.g., TransLink). This would require an amendment to the Members' Agreement, it would require ministerial approval (under Section 4 of the *Emergency Communications Corporation Act*) as well as a simple majority resolution of members holding Class A shares to amend Section 14.3 of the Members' Agreement. Alternatively, the Board could nominate its own director candidates, to be approved by a vote of the members.

7.2. Board Operations

- a) **Director experience.** Effective governance requires that directors have professional board experience, knowledge of E-Comm's operations and the technical skills required to oversee an organization of E-Comm's complexity and importance. Ideally, a strong Board would be comprised of directors with diverse and complementary knowledge, experience, skills, and competencies to oversee strategy, provide strong risk and oversight on key decisions, and hold management accountable – while representing E-Comm's interests taking account of the considerations of all stakeholders. These experience requirements could include areas such as prior large board experience, technical competencies (i.e., in the area of telecommunications and emergency communications services), relevant subject matter expertise (e.g., law, finance, information technology, human resources, etc.), as well as the communication and leadership experience to be able to mentor and oversee the CEO and the Executive team. While we understand that E-Comm's Board uses a skills matrix and formally requests that the appointing entities consider these skills in their appointments, there is no obligation for the appointing entities to do so.
- b) **Board committees.** The expectations, fiduciary requirements and potential liabilities of a Board director have increased significantly in recent years. To manage the variety of demands involved in reviewing and approving management materials, capital requests, financial statements and disclosures, compensation, director nominations, policy changes, corporate and risk management strategies, and the many other critical roles of a director, the leading practice is to develop specific subcommittees of the Board to remove these significant roles from the whole Board agenda. It is not uncommon for other Board directors to attend these committee meetings, but this approach serves to effectively spread the effort and improve board diligence in a number of critical governance areas. Specifically, E-Comm's Board could consider establishing/maintaining the following Board committees:⁸
 1. Governance & Public Affairs Committee
 2. Audit & Risk Committee
 3. People & Compensation Committee
 4. Finance & Capital Committee

⁸ See Appendix B for more details on the potential purpose, term and membership of these proposed Committees.

5. Strategic Transformation Advisory Committee (temporary)

Each Committee would be comprised of 3-4 directors and have formal terms of reference.

- c) User/Customer Representation.** The Members' Agreement provides for User and Service Committees for each of the agency groups (Police, Fire, Ambulance and Municipal) for radio network users. These have been largely underutilized, forcing users/customers to influence change and decisions directly through their Board appointees or through management. Committees could be structured to represent all user/customer interests and, in accordance with the intent of the Members' Agreement, advise management on operational policy, the delivery of all services and the requirements of the users of these services. These would form a critical input and advisory role to the Board, perhaps with limited approval capabilities, and have the responsibility to ensure regular and open communications with the Board and CEO.
- d) Board Terms of Reference and Policies.** Within the Board, each Committee should have a written Charter or Terms of Reference that defines its responsibilities and qualifications for membership. These do exist today for the current Committee structure, but there is an opportunity to revisit and enhance these through the re-envisioning of the Board and its Committees, as well as the strengthening of the User and Service Committees. The Governance and Nominating Committee should review Committee charters to ensure appropriate allocation of responsibilities, consultation and decision making. The Committees should regularly review and assess the adequacy of their own charters to ensure that their objectives, regulatory requirements, and best practices are clearly reflected within.

While a key step is to clarify the key evaluation, responsible and approval bodies for key decisions, the process to effectively implement this lies in the formal **Delegation of Authority**. This should define the quantitative (e.g., financial thresholds) and qualitative (e.g., risk factors) relating to each key decision category, providing clear guidance to the various levels of management as to what decisions they are empowered to make and what is required to be escalated for approval or consultation. Currently management will bring decisions to the Board for approval but there is limited formal guidance regarding the monetary thresholds and risk factors that would require elevation of decisions to the Executive and Board.

7.3. Summary of Recommendations – Board Governance

Based on the conclusions above, **we recommend the following changes to the Board structure and governance.**

1. Set the Board size to a maximum of 10 directors including the Board Chair.
2. Require all directors to meet specified independence requirements. This may not require all Directors to be fully independent (e.g., the provincial government may require continued representation, or the Board and members may decide a representative of a region or service is required to complete the skills matrix knowledge requirements)
3. Update the Articles for directors to serve on terms of 2-4 years, with the ability to be re-elected for 1-2 subsequent terms.
4. Implement a structured director on-boarding and exit/transition program to improve individual director knowledge, education and understanding of the operations of E-Comm.
5. Create a member nominating or screening committee to work with the Governance and Public Affairs Committee to facilitate the identification, screening, and recommendation of director candidates to the E-Comm Board for approval.
6. Use a skills matrix reflecting the diverse and complementary sets of knowledge, skills and competencies required by Board directors to oversee the strategy, provide strong risk and oversight to key decisions, and hold management accountable.

7. Consider leveraging a professional Board recruiter and/or the BC government CABRO to identify potential Board candidates.
8. E-Comm’s Board could consider establishing/maintaining the following Board and advisory committees:
 - i. Governance, Public Affairs & Nominating Committee
 - ii. Audit & Risk Committee
 - iii. People & Compensation Committee
 - iv. Finance & Capital Committee
 - v. Strategic Transformation Advisory Committee (temporary)
9. Refresh the User and Service Committees and redefine their Terms of Reference (within the requirements of the Members’ Agreement) to provide appropriate representation and input into key management and Board decisions.
10. Revise or develop formal Terms of Reference for each resulting Board committee to clarify roles, accountabilities, and management oversight responsibilities. In addition, the User and Service Committees and other advisory committees should also each have clearly defined Terms of Reference.
11. Revisit and clearly document the formal Delegation of Authorities for the Board down to the Executive and Management, including Management Committees.
12. The Board should adopt the guiding principles identified at the outset of this report and ensure they are reflected throughout their operating structure and decision-making process.

8. Recommendations – Stakeholder Engagement

E-Comm has struggled to maintain credibility and trust with their user groups and stakeholders given recent failures to meet budget expectations and other expectations regarding communications, engagement, and service delivery. There is significant misalignment across the expectations of users, which further amplifies the perceived concerns. There are frustrations with management’s communications, and a general concern regarding the focus and effectiveness of management in moving from a reactive to proactive state. Beyond the core users and shareholders, there is also a gap in the general public’s understanding of what E-Comm does and how it fits into the emergency response landscape – despite various efforts to improve public awareness.

From both a governance perspective and credibility perspective, E-Comm needs to continue to take a comprehensive approach to communications and engagement with key stakeholders to rebuild trust, strengthen the profile of the organization, and facilitate the level of support required to continue to evolve and mature the organization and the efficiency of its service delivery model. This needs to occur at several levels, as follows:

- Public awareness;
- Government relations;
- Board and member communications; and
- Customer relationship management.

8.1. Public awareness

The brand and even naming convention for E-Comm are not clearly understood by the general public. Despite increased communications, there is a need to increase public education and awareness around the role, structure, and responsibilities of E-Comm as a PSAP within the broader emergency response ecosystem, and how it interacts with other PSAPs and emergency response organizations. This could reinforce the success of E-Comm but also the challenges inherent in the system – strengthening

E-Comm's brand and profile while seeking public support for the role and investment required. This will become more critical as the NG9-1-1 transformation unfolds. Ultimately the overall success of E-Comm is highly dependent on supportive taxpayers and ratepayers appreciating the performance of a well governed organization and endorsing the funding support from all levels of government.

8.2. Government relations

A critical aspect of managing stakeholder engagement and the overall governance of the emergency response system is continuing to meet or exceed the standards of service delivery expected of all participants. Similarly, it is critical for the operational and financial sustainability of E-Comm that all participants understand and agree on the service level metrics each is committing to. Beyond the initial call taking metrics, these are not formally defined across the system, but rather determined by each local government and emergency response entity. There is a role for the Provincial government to play in working with local governments to support E-Comm and the other PSAPs in defining minimum standards expected across the system for public safety. The User Committee, as defined in the current Members' Agreement, would ordinarily be responsible for interpreting these standards and performance measures specifically for E-Comm across the designated services. Currently this Committee is underutilized and only has the mandate for radio services, requiring some evolution to support a stronger user/customer engagement model for service governance.

8.3. Chair and CEO roles

The Board Chair and CEO play a key role in maintaining strong relationships and communications with the various members, provincial and local government organizations, and other stakeholders. Beyond the effort required to educate and inform governments of the importance of policy directives and mandates such as common industry service metrics or funds and grants, there is a need to ensure strong ongoing alignment as part of the governance framework. They also both play a significant role in communications and relationship management with the members. One key consideration is the fact that the current Board Chair's term will end in the next year, creating the need for a strong transition throughout the implementation of the recommendations adopted in this report. The succession plan for the Chair and eventually the CEO at some point will be key considerations for the members and the incoming Board. The terms of the Chair and CEO are also considerations in any review of the Members' Agreement.

8.4. Board and Shareholder Communications

Board presentations should be transparent about risks or challenges. Resolving the size, structure and independence of the Board and its Committees will help the governance and oversight process significantly. Management reporting should be balanced and focused on what the Board needs to know, versus what management wants to share. Board meetings and materials should be structured to provide and allow for sufficient focused discussion on key challenges, metrics, and solutions – allowing early visibility and input to key risks and potential strategic initiatives well before formal approval is required. A strong Delegation of Authority framework, as described in the prior section, will also ensure the right decisions are being escalated to the right levels with the right supporting information.

8.5. Customer relationship management

There is a need for clarity, transparency, and consistency in communications to external stakeholders. In many instances users are forced to circumvent typical account management protocols and instead work directly with the Executive team or through their appointed Board director, creating significant inefficiency, governance and prioritization issues. The lack of a proactive customer relationship process and resource model is creating inefficiencies and credibility issues for E-Comm leadership. Communications with users relating to operating, billing or specific program concerns should be addressed by the appropriate members of management, ideally through some form of dedicated

account manager focused on anticipating the needs and concerns of key users, with unfettered access to senior executives as well as the operational and financial data required to resolve issues or present solutions.

Performance reporting and financial billings should also be clear, concise, and transparent, supported by relevant statistics and other relevant information related to contractual service delivery metrics and budget/funding expectations. This likely requires further investment in data analytics and business intelligence reporting capabilities.

8.6. Summary of Recommendations – Stakeholder Engagement

We recommend E-Comm consider **implementing the following recommendations to improve the governance, oversight and communications with key stakeholders, including its members:**

1. Leverage the User and Service Committees to not only provide appropriate representation and input into key management and Board decisions on behalf of users, but also support change management and communications back to these organizations around key initiatives.
2. There is a need to increase public education and awareness around the role, structure, and responsibilities of E-Comm as a PSAP within the broader emergency response ecosystem.
3. There is an opportunity for E-Comm to work with the provincial government to clarify service delivery expectations for all PSAPs and stakeholders across the emergency communications landscape in BC.
4. Board agendas, materials and presentations should be concise and transparent about risks or challenges. Board meetings and materials should be structured to provide and allow for sufficient focused discussion on key challenges, metrics, and solutions – allowing early visibility and input to key risks and potential strategic initiatives well before formal approval is required.
5. Ensure a clear succession plan for the Chair and CEO are in place and communicated to all members.
6. Communications with users relating to operational, billing, or specific program concerns should be addressed by the appropriate members of management. Consider an account manager focused on anticipating the needs and concerns of key users, with access to senior executives as well as the operational and financial data required to resolve issues or present solutions.
7. Performance reporting and financial billings to users should be clear, concise, and transparent, supported by relevant statistics and other relevant information related to contractual service delivery metrics and budget/funding expectations.

9. Recommendations – Funding Model

An area of significant concern for both management and external stakeholders is the financial management and sustainability of E-Comm. A number of key concerns were raised regarding the transparency, reliability and predictability of financial information provided to them. Following our overall governance guiding principles, there is a need for stronger accountability, transparency, fairness and defensibility in the calculation and allocation of cost recoveries. The overall scalability and sustainability are in question, particularly regarding the ability to identify new capital sources as well as moving from a net deficit to net surplus position.

The key future state governance and funding model recommendations fall into the same three primary categories as our observations of current state challenges:

1. Long-term capital investment planning
2. Operational costing and forecasting
3. Pricing model

9.1. Long-Term Capital Investment Planning

Stakeholders recognize the fact that significant investments are required to support the transformation to a stable operating model, to generate efficiencies and economies of scale, and to implement NG9-1-1 technologies. However, there is currently a lack of clarity as to how future capital requirements will be funded and how much will be required. As such, there is a strong need for a more transparent, longer-term capital investment planning model.

E-Comm needs to clearly define and cost each service’s infrastructure requirements for the short, medium and long term (both capital and ongoing operating costs as a result of the capital spend). This information should be populated into a long-term infrastructure planning model. Key to the success of this model is achieving clarity on how each capital project is funded and the impact on customers.

a) Funding sources

A systematic approach should be developed to identify new funding sources to offset these capital investment expenditures, including maximizing revenue from existing sources (within the expectations of users). This includes, but is not limited to the following sources:

Within E-Comm’s direct control:	
Borrowing	<p>Section 8 of the <i>ECC Act</i> provides that E-Comm may borrow money required for (a) capital purposes related to the purposes of the corporation and (b) to meet its current operating expenses before its revenue, from all sources, to pay for those expenses has been received.</p> <p>The Articles outline E-Comm’s ability to borrow: E-Comm’s Directors may “borrow money in such manner and amount, on such security, from such sources and upon such terms and conditions as they think fit” (Schedule A to the Members’ Agreement at Part 8). Borrowings in excess of that set out in an Authorized Operating Budget or an Authorized Capital Budget require approval by a vote of not less than two-thirds of the votes cast by Members holding Class A Shares per section 2.5.4 of the Members’ Agreement.</p> <p>In 1998, E-Comm entered into an agreement with the Municipal Finance Authority of British Columbia (MFA) to borrow up to a maximum of \$170M. As of December 31, 2023, E-Comm’s total long-term debt was \$13.6M (down from \$22.1M in 2022 and \$34.4M in 2021).</p> <p>E-Comm should review and confirm the feasibility, value-for-money and sustainability of increasing its long-term borrowing – be it with MFA or other lenders – specifically for the purpose of infrastructure investment.</p>
Debentures and Bonds	<p>The Articles permits E-Comm’s Directors to “issue bonds, debentures and other debt obligations either outright or as security for any liability or obligation of the company or any other person” (Schedule A to the Members’ Agreement at Part 8). Issuing debentures or bonds could be a relatively inexpensive, efficient, and direct means of securing funding for specific capital projects.</p> <p>Though borrowing from the MFA would likely present a cheaper financing option, E-Comm does have the fallback option of issuing debentures or bonds as a potential additional or alternative source of funding for specific and time-bound infrastructure projects.</p>

Grants	E-Comm should implement a business case development function / mechanism / process to secure grant or other sources of funding for specific capital projects.
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All funding (capital and operational) received from customers stems from municipal taxpayers. Under the current corporate structure, E-Comm has no control over taxes or other levies placed on taxpayers by the provincial or local governments. E-Comm's customers utilize public funds to pay for the services, primarily through a call-answer levy (CAL) on landline phones and property taxes.

To review and enhance the approach to raising taxes and levies to fund emergency communications in BC, E-Comm should develop a coordinated approach with the relevant key stakeholders, including the Provincial Government, Regional Districts and Municipalities. The complexity of negotiating many service contracts with local governments and the inability of E-Comm to influence telecommunications provider negotiations with local governments (i.e., in the case of NG9-1-1 funding) does create significant overhead and time commitment for E-Comm. One of the UBCM recommendations in their special resolution was to consolidate contractual negotiations into a single payor model whereby the Provincial government would take the lead in these contractual negotiations insulating E-Comm from this complexity and the many payment streams. There is certainly merit to E-Comm in having this single payment customer model and the reduced governance and management complexities it would provide. There would still need to be a strong stakeholder engagement model, likely encompassing Provincial government personnel, to ensure the users continue to receive the quality of service they are paying for.

E-Comm's long-term infrastructure planning model should include detailed and costed-out funding scenarios to be used to illustrate the financial benefits of an enhanced funding approach over time versus the current reactive *status quo*.

Potential funding sources of this nature include the following:

Beyond E-Comm's direct control:	
Landline Levies	Landline levies are not currently mandatory in BC. In addition, due to the decreasing proportion of households with landlines (52.4% in BC in 2019 ⁹) and an inconsistent approach to utilizing landlines across BC's jurisdictions, they would not be a substantial and sustainable source of funding in the medium-to-long term. In general, call answer levies are mandated by the Provincial government, collected and administered by the telecommunications providers, and distributed through a funding entity to local governments who have agreed to participate in this program to spend at their discretion on relevant call answer and dispatch services. As such, and also considering that not all municipalities choose to fund their call answer services through this source, there is limited control by E-Comm over this form of funding.
Property Taxes	Property taxes are the other primary source of funding used by BC local governments to raise funds for emergency communications, often in lieu of call answer levies. However, the approach and tax rates are inconsistent from municipality to municipality.
Cellular Phone Levies	Cell phone levies to fund emergency communications do not currently exist in BC. E-Comm could advocate for the implementation of a province-wide cell phone levy as a potential new revenue source, although similar to a landline call answer levy (CAL), these revenues would likely have to be collected into a specific dedicated fund and distributed to municipalities to support their costs of providing or sourcing PSAP and emergency services at the specific request of the municipality.

⁹ <https://www150.statcan.gc.ca/n1/daily-quotidien/210122/t002b-eng.htm>

	<p>Over 92.9% of BC households have at least one cellular telephone¹⁰. A universal cell phone levy could ultimately be more equitable than the existing levies and taxes. Initially, a cell-phone levy could eventually replace a number of other taxes and levies over time.</p> <p>This will require a coordinated approach between the Province, municipalities and telecommunications providers (which we expect will receive significant pushback without a compelling business case).</p> <p>Assuming support for this model, cell phone levy funding potential could be¹¹:</p> <table style="margin-left: 40px;"> <tr> <td>Monthly fee range across Canadian Provinces</td> <td>\$0.43-\$1.95</td> </tr> <tr> <td>Average monthly fee</td> <td>\$0.96</td> </tr> <tr> <td>BC population¹²</td> <td>5.58M</td> </tr> <tr> <td>Proportion of population with cell-phone</td> <td>84%¹³</td> </tr> <tr> <td>Estimated total cell phones in BC</td> <td>4.69M</td> </tr> </table> <p>Based on an average monthly fee the total annual gross revenue (before any applicable administration or other fees) could be over \$54M.</p>	Monthly fee range across Canadian Provinces	\$0.43-\$1.95	Average monthly fee	\$0.96	BC population ¹²	5.58M	Proportion of population with cell-phone	84% ¹³	Estimated total cell phones in BC	4.69M
Monthly fee range across Canadian Provinces	\$0.43-\$1.95										
Average monthly fee	\$0.96										
BC population ¹²	5.58M										
Proportion of population with cell-phone	84% ¹³										
Estimated total cell phones in BC	4.69M										

b) Capital reserves

One of the key challenges identified as part of this review is the inability of E-Comm to effectively carry forward capital reserves to facilitate both the balancing of levies charged to users as well as better matching funding sources to expenditures. Ideally E-Comm would create capital investment funds/reserves to enhance transparency, reportability and more efficient and effective management of capital funds.

The capital budget is authorized by the Board. The board is responsible for determining and approving “all long-term capital requirements of the Company” per s. 4.10.6 of the Members’ Agreement and the board will approve “a proposed annual capital budget for such fiscal year which will provide for all capital expenditures to be made for the Company for that year and any long-term capital plans or proposed capital expenditures for any subsequent years” per s. 7.4 of the Members’ Agreement.

Section 4.7 of Schedule C of the Members’ Agreement sets out: “No costs are carried forward for future allocation, nor is a Latecomer Agency charged any costs beyond their current-year cost share”, with the exception of: set up costs; discrepancies within a year; and working capital funds retained by E-Comm. The latter could be considered a reserve but does not likely meet the requirements for ongoing capital expenditures as it is specifically referring to working capital.

To amend Schedule C to allocate capital or other costs not already covered in this schedule or otherwise create capital reserves, approval by a simple majority resolution of Members holding Class A shares to amend the Members’ Agreement will be required. This should be strongly considered once a realistic, predictable capital investment planning model has been created.

c) Investment monitoring and reporting

A capital investment cost allocation approach should be developed (i.e., the capital funding gap after taking into account all other funding sources) based on each service type’s infrastructure requirements. This provides the basis for transparent reporting and ongoing investment monitoring.

Dashboard reporting capabilities should be developed to enhance the transparency and manageability of capital investments. These should be reported regularly to the Board and funders (including customers) particularly regarding:

¹⁰ <https://www150.statcan.gc.ca/n1/daily-quotidien/210122/t002b-eng.htm>

¹¹ Monthly fees per Province obtained from <https://www.telus.com/en/support/article/enhanced-911-e911>

¹² <https://www2.gov.bc.ca/assets/gov/data/statistics/people-population-community/population/quarterly-population-highlights.pdf>

¹³ <https://www.statcan.gc.ca/o1/en/plus/3582-so-long-landline-hello-smartphone>

- Infrastructure requirements.
- Progress against the infrastructure investment plan.
- Capital spends and movements in the capital investment funds / reserves.
- New and amended sources of funding, including the impact on capital cost allocation to customers.

9.2. Operational Costing and Forecasting

There is a concern amongst the key stakeholders that E-Comm has historically not understood the true costs of delivering, maintaining, and upgrading the business, while taking on new customers over time (not always by choice and often adding to the structural deficit). In addition, users cited a significant frustration regarding the lack of transparency and understanding of the cost components of their invoices.

E-Comm needs to re-baseline the allocation of direct and shared operational costs across all services. Allocations should be based on service type and informed by other key metrics and reviewed and updated on at least an annual basis. The cost allocation should be aligned with the minimum standards (refer to Section 5 'Corporate Structure'), which, in enabling E-Comm to adopt more standardized service offerings, should allow for more standardized costs. The Members' Agreement states that costs should be reviewed on at least an annual basis and there is no restriction preventing E-Comm from reviewing and updating this corporate overhead ratio (or indeed a different method of allocation the costs) on at least an annual basis. However, this does require a stronger understanding of cost drivers and investment needs than exists today.

Any changes to current operational and capital cost allocation models beyond this, however, will require amendments to – or replacement of – Schedule C of the Members' Agreement, which requires approval by a simple majority resolution of Class A Members (s. 14.3 of the Members' Agreement). The cost allocation model currently outlined in Schedule C applies only to radio users.

There is also a need to develop a transparent, scalable mechanism to allocate corporate overhead costs across all services. This mechanism should be fair and equitable for all; based on key metrics (e.g., population, call volume, incident volume, call handle time, etc.); embedded into all service contracts; and revisited annually to reflect changes in key underlying metrics/cost drivers.

From an operational financial planning and reporting perspective, there is a need to develop enhanced budgeting and forecasting processes and to implement software solutions to automate the collection, allocation and prioritization of budgets. E-Comm should develop a rolling, scalable and reportable financial forecast for a 5+ year timeframe, including consideration of changes in customer volume, customer service needs and future transformations. This should be supported by dashboard reporting capabilities to enhance budget and forecast transparency, manageability, monitoring, and enforcement. These should be regularly reported to the Board and customers relating to costs, forecasts, and movement in reserves.

9.3. Pricing Model

The stakeholder interviews identified a commonly held perception that E-Comm is not fairly pricing its services and is seen to be creating additional costs and service delivery risks for existing customers, while creating a strong sense of inequity in treatment. There is a strong desire across all stakeholders for a transparent, predictable, and equitable pricing structure – which is highly dependent on the strong capital investment planning, funding and operational forecasting programs described above.

E-Comm should develop a new, transparent, predictable, and equitable service delivery pricing model, with standardized pricing options. The model should be informed by the re-baselining of costs; operating forecasts; long-term capital investment requirements; and incorporate all known and

expected funding sources (e.g., call levies, property taxes, government grants, borrowing, debentures, bonds, or other sources etc.).

The current pure cost recovery model should be enhanced to reflect more of a 'cost + mark-up' approach, which will enable enhanced predictability, customization, and defensibility. Changes will be required to Schedule C of the Members' Agreement, including amending the current cost recovery model for radio services to allow for a 'cost + mark-up' approach. Amending Schedule C requires approval by a simple majority resolution of Class A Members (s. 14.3 of the Members' Agreement). In addition, though Schedule C of the Members' Agreement applies only to radio services, a cost recovery approach is also currently applied by E-Comm for other service agreements (e.g., "Dispatch" service i.e. certain non-radio services). Therefore, changes will also need to be implemented for other service agreements to allow for a standardized 'cost + mark-up' approach for all services.

From a communication and reporting perspective, the pricing model should provide for full transparency of key cost components (operational, overheads and capital investment). The mark-up calculation should also be transparent and consistent for all customers, with any surplus' restricted to approved levels and directed to a multi-year capital investment fund.

A rebalancing of the cost allocations will likely result in customers who have previously benefited from the existing pricing model experiencing cost increases; conversely, costs will likely reduce for customers who have historically paid higher allocations. E-Comm will need to develop a change management plan to implement the transition to the new pricing model.

9.4. Summary of Recommendations – Funding Model

We recommend E-Comm consider **implementing the following capital investment planning, operational forecasting and budgeting, and pricing model recommendations** as a component of the materials supporting any shareholder resolutions or Special General Meetings relating to the implementation of any adopted governance changes as outlined in this report:

Long-Term Capital Investment Planning:

1. Clearly define and cost each service's infrastructure requirements for the short-, medium- and long-term.
2. Develop an equitable and firm long-term infrastructure investment planning model, which takes into consideration all funding sources. Key to the model is achieving clarity on determining how each capital project is funded, and the impact on customers.
3. Develop a systematic approach to identify and secure new funding sources, as well as maximizing the revenue received from existing sources.
4. Implement a business case development function / mechanism / process to secure other sources of grant or other funding for specific capital projects.
5. Continue to work with local governments to lobby the Provincial government regarding the possibility of a wireless call answer levy to support local government PSAP costs.
6. Develop a capital investment cost allocation approach based on each service type's infrastructure requirements. This should provide the basis for transparent reporting and ongoing investment monitoring.
7. Consider seeking member approval to amend the Members' Agreement to create reasonable capital reserves to balance funding requests. This should be a consideration once a realistic, predictable capital investment planning model has been created.
8. Develop capital investment dashboard reporting capabilities to enhance the transparency and manageability of capital investments. These should be reported regularly to the Board and funders (including customers).

Operational Costing and Forecasting:

9. Consider re-baselining the allocation of direct and shared operational costs across all services. Allocations should be based on service type and informed by other key metrics and reviewed and updated on at least an annual basis.
10. Develop a transparent, scalable mechanism to allocate corporate overhead costs across all services. This mechanism should be fair and equitable for all; based on key metrics (e.g., population, call volume, incident volume, call handle time, etc.); embedded into all service contracts; and revisited annually to reflect changes in key underlying metrics/cost drivers.
11. Develop enhanced budgeting and forecasting processes and implement software solutions to automate the collection, allocation, and prioritization of budgets. As part of this, E-Comm should develop a rolling, scalable and reportable financial forecast for a 5+ year timeframe, including consideration of changes in customer volume, customer service needs and future transformations.
12. Develop dashboard reporting capabilities to enhance budget and forecast transparency, manageability, monitoring and enforcement. Regularly report to the Board and users/customers on costs, forecast, and movement in reserves.

Pricing Model:

13. Develop a new, transparent, predictable and equitable service delivery pricing model, with standardized pricing options. Ideally, this should be implemented for all contract renewals beyond 2025.
14. The current pure cost recovery model should be enhanced to reflect more of a 'cost + mark-up' approach (while staying within the requirements of the Members' Agreement).
15. Develop a change management plan to implement the transition to the new pricing model.

10. Overall Conclusions

E-Comm's operating paradigm has changed dramatically since it was conceived. The increased number of stakeholders, rapid pace of technological change, pressure to meet diverse user and public expectations, the ability to find and retain strong talent, and to achieve all of this on a minimal budget, has left E-Comm in a position of financial and technological deficit and with a credibility gap with its stakeholders including its members. While some aspects of the organization have evolved and scaled with this growth trajectory, E-Comm's governance framework has remained somewhat stagnant and is constantly challenged to provide effective oversight and accountability.

However, despite these concerns, E-Comm continues to meet and exceed its core 9-1-1 call answer performance metrics and remains well placed to continue to be the cornerstone of the emergency response system for BC into the future. Several critical changes need to be made to E-Comm's governance framework including in its stakeholder (including member and user/customer) engagement and its operational and financial oversight. While these changes may seem relatively intuitive, to-date, E-Comm has not fully implemented them due to management's significant workload to maintain a high level of operational responsiveness and to implement the more critical infrastructure, technology, human resource, and operational transformations that are required. The success of this governance transformation will depend on creating a strong Board oversight mechanism while freeing up management by providing to them the appropriate support and resources to elevate them out of their current reactive mode.

Our key recommendations include the following (without consideration of dependencies and therefore not listed in the order of implementation timeline¹⁴). It should be noted that this will initially require extensive member communications and engagement in order to formulate and align around the specifics of the implementation plans, activities and timelines:

- 1) Implement a new governance structure (including a streamlined Board).
- 2) Refine the use of representative service governance bodies, such as User and Service Committees with member appointed representatives. The committees should have broadly understood Terms of Reference and serve to enhance user representation in the governance structure.
- 3) Propose revisions to Board and Management Committees to support enhanced decision-making and oversight.
- 4) Create a member Nominating or Screening Committee to identify and approve new Board director candidates.
- 5) Enfranchise all users regardless of regional geography by making them shareholders (rather than the current state in which only radio users are Class A members).
- 6) Seek Board, member, and ministerial approvals, as required, for proposed changes to the governance structure and Articles/Members' Agreement.
- 7) Refine the Board agenda, cycle, materials, procedures, and policies, including a formal Delegation of Authorities.
- 8) Redesign the operating cost/budgeting model to provide greater equity and transparency while reducing the perception that the cost allocation process is not equitable.
- 9) Develop a streamlined service delivery and pricing process to drive stronger economies of scale and efficiency in the governance, pricing, and service delivery processes.
- 10) Develop investment funding and operating cost forecasting strategies to provide greater clarity of future costs and remove unexpected fluctuations from the pricing/funding models.

Although E-Comm is only one organization in the provincial emergency response ecosystem, it is a prominent one. There is a significant risk to public safety if E-Comm does not address its current trajectory through this governance review. Time is of the essence in continuing to strengthen E-Comm's governance and oversight.

¹⁴ See Appendix D – Implementation Roadmap for a chronological implementation approach and timeline.

APPENDIX A – SHAREHOLDER STRUCTURE

The following chart lists the 26 current **Class A** shareholders of E-Comm and number of Board seats:

Shareholder	Services	Seats	Nominating Body
Abbotsford	Fire	1	City of Abbotsford
Abbotsford Police Board	Police	1	Independent Police Boards (Abbotsford, New Westminster, Port Moody, Transit Police, West Vancouver)
New Westminster Police Board	Police		
Transit Police Board	Police		
BC Emergency Health Services	Ambulance	1	BC Emergency Health Services
Burnaby	Police	2	Cities of Burnaby, Coquitlam, New Westminster, Port Coquitlam, Port Moody, Belcarra
Coquitlam	Fire		
	Police		
New Westminster	Fire		
Port Coquitlam	Fire		
	Police		
Port Moody	Fire		
	Police		
Delta	Fire	1	City of Delta/Delta Police Board
Delta Police Board	Police		
Langley City	Fire	2	Cities of Langley, Surrey and White Rock, Township of Langley
Langley Township	Fire		
	Police		
Surrey	Fire		
	Police		
White Rock	Fire		
	Police		
Lions Bay	Fire	1	City of North Vancouver, District of North Vancouver, District of West Vancouver, Village of Lions Bay
North Vancouver City	Fire		
	Police		
North Vancouver District	Fire		
West Vancouver	Fire		
	Police		
Maple Ridge	Fire	1	Cities of Maple Ridge and Pitt Meadows
	Police		
Pitt Meadows	Fire		
	Police		
Richmond	Fire	1	City of Richmond
	Police		
South Coast British Columbia Transportation Authority	Municipal Services	1	Metro Vancouver and TransLink
Vancouver	Fire	1	City of Vancouver
Vancouver Police Board	Police	1	Vancouver Police Board
N/A	N/A	1	Capital Regional District & E-Comm's Southern Vancouver Island police agency partners
N/A	N/A	1	RCMP
N/A	N/A	2	Provincial Government
N/A	N/A	5	Independent
TOTAL		23	

The following chart lists the 16 current **Class B** shareholders of E-Comm:

Shareholder	Services
Belcarra	Municipal Services
	Fire
	Police
Coquitlam	Municipal Services
Delta	Municipal Services
Langley Township	Municipal Services
Maple Ridge	Municipal Services
Metro Vancouver	Municipal Services
New Westminster	Municipal Services
North Vancouver City	Municipal Services
North Vancouver District	Police
Pitt Meadows	Municipal Services
Port Coquitlam	Municipal Services
Port Moody	Municipal Services
Richmond	Municipal Services
Surrey	Municipal Services
Vancouver	Municipal Services
West Vancouver	Municipal Services

APPENDIX B – EXAMPLE BOARD COMMITTEES

To effectively govern E-Comm, we have recommended a number of potential Board Committees. Some example Committees and mandates have been presented below to assist in the confirmation and development of the terms for these Committees. The following outlines the purpose, recommended duration, and membership of such Committees.

- A. Governance & Public Affairs Committee** – The Governance & Public Affairs Committee exercises general oversight with respect to the governance of the Board of Directors.

Duration – Standing Committee

Purpose - The Governance & Public Affairs Committee is charged with the care and feeding of the board itself. The Committee would be responsible for board recruitment and nomination, orientation, board, and director self-assessment, continuing education, and board management. The Committee also hold accountability for policy development, how management and the board interact, and the board agenda. Amongst other responsibilities, this Committee would also oversee board self-assessment process, continuing education for board members, mentoring program for directors and adoption and enforcement of a conflict-of-interest policy and a code of conduct among the directors.

Membership – As determined by the roster of individuals who are selected based on a skills matrix (ideally including governance and legal competency) for the defined term, to provide a wholesome skills representation on the board at any point in time.

- B. Audit & Risk Committee** – The Audit & Risk Committee provides oversight of the financial statement disclosures, selection and interface with the external and internal auditor, and oversight of strategic risks and internal controls.

Duration – Standing Committee

Purpose – The Audit & Risk Committee assists the Board in its oversight of management’s responsibility to assure that there is an effective system of controls reasonably designed to safeguard E-Comm’s assets and income, assure the integrity of E-Comm’s financial statements, and maintain compliance with E-Comm’s ethical standards, policies, plans and procedures, and with laws and regulations. The Audit & Risk Committee may be charged with a wide range of responsibilities, such as oversight of operational and capital budget preparation and presentation process, monitoring integrity of financial reporting and accounting practices, reviewing financial and fiscal policies, practices and procedures and provide recommendations for stakeholder engagement strategies to obtain feedback on budgets and expenses. The Audit & Risk Committee also assists the Board in its oversight of management’s responsibility to implement an effective strategic risk management framework, as well as overseeing the performance of E-Comm’s External Audit selection and Internal Audit function, if at such time one is required.

Membership - Members of the Audit & Risk Committee should be financially literate, and at least one (and preferably more) should be financial professionals. While there may be some overlap in membership with the Finance Committee, the chair of the Finance Committee and the treasurer should not be on the Audit Committee. Likewise, the chair of the board and the CEO should not be on the Audit & Risk Committee. These restrictions are intended to provide the committee with the independence it requires to operate effectively.

- C. People & Compensation Committee** – The role of the People & Compensation Committee is to enhance the culture and experience in the organization so that E-Comm’s talent is engaged and empowered and that E-Comm is viewed as an employer of choice in the industry, as well as ensuring CEO and management compensation and incentive structures are appropriate.

Duration – Standing Committee

Purpose – The People & Compensation Committee would advise the Board on fulfilling its corporate governance responsibilities relating to all people and culture matters including the selection, appointment, and evaluation of the Chief Executive Officer (CEO) and their compensation. The Committee should have a culture mandate to co-create cultural and behavioral aspirations for leadership and the broader community that can guide and inform E-Comm’s interactions. The People & Compensation Committee would provide oversight of compensation policies, programs, and related plans.

Membership – Constituted by a majority of independent board members, who are skilled in overseeing the people risks and related mitigations. These skills are considered adjacent to their understanding of the role and remit of E-Comm’s strategies, what talent support and culture of engagement is required for E-Comm to achieve those goals.

- D. Finance & Capital Committee** – The role of the Finance & Capital Committee is to develop and advise on E-Comm’s operational financial performance, forecasts and budgets and its capital funding requirements and related investments.

Duration – Standing Committee

Purpose – Provide oversight of operational and capital budget preparation and presentation process, reviewing financial and fiscal policies, practices and procedures and provide recommendations for stakeholder engagement strategies to obtain feedback on budgets and expenses. The Finance & Capital Committee’s responsibilities could also include oversight of a future looking capital adequacy model design, analysis, and recommendation to board for decision-making on key capital projects. The Finance & Capital Committee would also review board policies regarding asset/liability management, capital adequacy, interest rate sensitivity, liquidity risk, and investments. The Finance & Capital Committee would recommend to the Board any necessary changes to such policies and oversee the effectiveness of the Company’s capital management processes. The Finance & Capital Committee would also oversee the development of a capital investment program that can support E-Comm’s ability to meet its strategies. The Finance & Capital Committee would also review feasibility studies for capital project suggestions brought to the Committee, approve expansion plans, changes to capital budgets and schedules, including cancellation of projects where necessary and all other material investment opportunities.

Membership – All members of Finance & Capital Committee should have experience with strategic investment requirements, heightened financial literacy and an acute sense of the industry, economy and levels of influence required from all stakeholders to implement the operational financial decisions and capital investment decisions, including a clear understanding of the role of the Province.

- E. Strategic Transformation Advisory Committee** – A Strategic Transformation Advisory Committee (STAC) is created for a defined term, to focus on the time-sensitive and significant technology or organization transformation programs. In the context of E-Comm, this could oversee and coordinate the NG9-1-1 transformation program, for example.

Duration – Defined Term

Purpose – The Strategic Transformation Advisory Committee would oversee E-Comm’s governance, operational, technology, and other transformation initiatives which would typically include elements of customer relationship management, digital and infrastructure enablement, data management and analytics, and change management. This Committee could monitor and evaluate market and industry trends and opportunities for innovation, increase board awareness of the trends and constructively challenge E-Comm management’s transformation plans. Being an advisory Committee, it would guide the management in its transformation journey and in parallel, provide advice to the board. The board would ultimately approve transformational plans and budgets.

Membership - STAC is a combination of board members, former board members, as well as subject matter experts with experience serving in an oversight role over organizations that have gone through significant transformation.

APPENDIX C – SUMMARY OF RECOMMENDATIONS

There are a total of 38 key recommendations. They are organized by 4 categories:

- 1) Corporate Structure
- 2) Board Governance
- 3) Stakeholder Engagement
- 4) Funding Model

1. Corporate Structure

#	Recommendation
1.1	Maintain the current corporate legal structure.
1.2	Review and amend the Members' Agreement to address current inconsistencies or opportunities identified in this report (e.g., simplifying the shareholder voting structure; ensuring equity in approval and approval of decisions impacting all members; screening the nomination and approval of new Directors; facilitate the accumulation of capital reserves; etc.).
1.3	Seek member and ministerial approval for the simplification of the share structure to a common shareholder model whereby all customers are considered equal shareholders and members.
1.4	Develop a guidance document (Frequently Asked Questions) to support management and the Board in their understanding and interpretation of what is possible vs. not permitted under the requirements of the Members' Agreement. This should be updated as new questions and concerns are raised for clarification

2. Board Governance

c	Recommendation
1.1	Set the Board size to a maximum of 10 directors including the Board Chair.
1.2	Require all directors to meet specified independence requirements. This may not require all Directors to be fully independent (e.g., the provincial government may require continued representation, or the Board and members may decide a representative of a region or emergency service is required to complete the skills matrix knowledge requirements).
1.3	Update the Articles to allow a term of 2-4 years, with the ability to be re-elected for 1-2 subsequent terms.
1.4	Implement a structured director on-boarding and exit/transition program to improve individual director knowledge, education and understanding of the operations of E-Comm.
1.5	Create a member nominating or screening committee to facilitate the identification, screening, and recommendation and approval of director candidates to the E-Comm Board.
1.6	Use a skills matrix reflecting the diverse and complementary sets of knowledge, skills and competencies required by Board directors to oversee the strategy, provide strong risk and oversight to key decisions, and hold management accountable.
1.7	Consider leveraging a professional Board recruiter and/or the BC government CABRO to identify potential Board candidates.
1.8	E-Comm's Board could consider establishing/maintaining the following Board committees: <ol style="list-style-type: none"> 1. Governance, Public Affairs & Nominating Committee 2. Audit & Risk Committee 3. People & Compensation Committee 4. Finance Committee 5. Strategic Transformation Advisory Committee (temporary)

1.9	Revisit the User and Service Committees and redefine their Terms of Reference (within the requirements of the Members' Agreement) to provide appropriate representation and input into key management and Board decisions.
1.10	Revise or develop formal Terms of Reference for each resulting Board committee to clarify roles, accountabilities, and management oversight responsibilities. In addition, the User and Service Committees and other advisory committees should also each have clearly defined Terms of Reference.
1.11	Revisit and clearly document the formal Delegation of Authorities for the Board down to the Executive and Management, including Management Committees.
1.12	The Board should adopt the guiding principles identified at the outset of this report and ensure they are reflected throughout their operating structure and decision-making process.

3. Stakeholder Engagement

#	Recommendation
3.1	Leverage the User and Service Committees to not only provide appropriate representation and input into key management and Board decisions on behalf of users/customers, but also support change management and communications back to these organizations around key initiatives for service governance.
3.2	There is a need to increase public education and awareness around the role, structure, and responsibilities of E-Comm as a PSAP within the broader emergency response ecosystem.
3.3	There is an opportunity for E-Comm to work with the provincial government to clarify service delivery expectations for all PSAPs and stakeholders across the emergency communications landscape in BC.
3.4	Board agendas, materials and presentations should be concise and transparent about risks or challenges. Board meetings and materials should be structured to provide and allow for sufficient focused discussion on key challenges, metrics, and solutions – allowing early visibility and input to key risks and potential strategic initiatives well before formal approval is required.
3.5	Ensure a clear succession plan for the Chair and CEO are in place and communicated to all members.
3.6	Communications with users relating to operational, billing, or specific program concerns should be addressed by the appropriate members of management. Consider an account manager focused on anticipating the needs and concerns of key users, with access to senior executives as well as the operational and financial data required to resolve issues or present solutions
3.7	Performance reporting and financial billings to users should be clear, concise, and transparent, supported by relevant statistics and other relevant information related to contractual service delivery metrics and budget/funding expectations.

4. Funding Model

Long-Term Capital Investment Planning

#	Recommendation
4.1	Clearly define and cost each service's infrastructure requirements for the short-, medium- and long-term.
4.2	Develop an equitable and firm long-term infrastructure investment planning model which takes into consideration all funding sources. Key to the model is achieving clarity on determining how each capital project is funded, and the impact on customers.

4.3	Develop a systematic approach to identify and secure new funding sources, as well as maximizing the revenue received from existing sources.
4.4	Implement a business case development function / mechanism / process to secure other sources of grant or other funding for specific capital projects.
4.5	Continue to work with local governments to lobby the provincial government regarding the possibility of a cell phone call answer levy to support local government PSAP costs.
4.6	Develop a capital investment cost allocation approach based on each service type's infrastructure requirements. This should provide the basis for transparent reporting and ongoing investment monitoring.
4.7	Consider seeking member approval to amend the Members' Agreement to create reasonable capital reserves to balance funding requests. This should be a consideration once a realistic, predictable capital investment planning model has been created.
4.8	Develop capital investment dashboard reporting capabilities to enhance the transparency and management of capital investments. These should be reported regularly to the Board and funders (including customers).

Operational Costing and Forecasting

#	Recommendation
4.9	Consider re-baselining the allocation of direct and shared operational costs across all services. Allocations should be based on service type and informed by other key metrics and reviewed and updated on at least an annual basis.
4.10	Develop a transparent, scalable mechanism to allocate corporate overhead costs across all services. This mechanism should be fair and equitable for all; based on key metrics (e.g., population, call volume, incident volume, call handle time, etc.); embedded into all service contracts; and revisited annually to reflect changes in key underlying metrics/cost drivers.
4.11	Develop enhanced budgeting and forecasting processes and implement software solutions to automate the collection, allocation, and prioritization of budgets. As part of this, E-Comm should develop a rolling, scalable and reportable financial forecast for a 5+ year timeframe, including consideration of changes in customer volume, customer service needs and future transformations.
4.12	Develop dashboard reporting capabilities to enhance budget and forecast transparency, manageability, monitoring and enforcement. transparency and manageability. Regularly report to the Board and customers on costs, forecast, and movement in reserves

Pricing Model

#	Recommendation
4.13	Develop a new, transparent, predictable, and equitable service delivery pricing model, with standardized pricing options. Ideally, this should be implemented for all contract renewals beyond 2025.
4.14	The current pure cost recovery model should be enhanced to reflect more of a 'cost + mark-up' approach (while staying within the requirements of the Members' Agreement).
4.15	Develop a change management plan to implement the transition to the new pricing model.

APPENDIX D – IMPLEMENTATION ROADMAP

The following outlines our proposed implementation roadmap. This provides a high-level overview of a logical approach to implementing the recommendations in our review, subject to the Board, Ministerial and Executive review and approval:

Initiative	Jun-Aug '24	Sep-Nov '24	Dec'24–Feb'25	Mar-May '25	Jun-Aug '25	Sep-Nov '25	Dec'25-Feb'26
Board and Shareholder Validation of Key Governance Actions							
1.a Executive and Board review of report/recommendations	★						
1.b Prepare communications and engage with Shareholders/Province							
1.c Seek Shareholder approval to move forward with recommendations		▼					
1.d Refine key actions, responsibilities and detailed implementation plan							
1.e Prepare for Special General Meeting (Q1 2025)							
1.f Board, Shareholder resolutions and approvals (incl. Ministerial)			▼				
1.g Implement governance oversight/program management					Governance Program Management function		
Implement Board Governance Structure							
2.a Create Shareholder Nominating Committee & director candidates			★				
2.b Select, nominate and approve Chair and directors							
2.c Implement corporate structure and shareholder changes							
2.d Install new Board Directors and structure/terms of reference							
Implement Board Governance & Decision-making Processes							
3.a Create Board Committees (incl. User/Service Committees)				★			
3.b Refine board agenda, materials and procedures							
3.c Implement appropriate Management Committee structure							
3.d Develop formal Delegation of Authorities							
3.e Identify required stakeholder committee/task force participation							
Implement Investment Funding/Operating Cost Forecasting Strategies							
4.a Develop and seek approval for capital reserve strategy				★			
4.b Refine investment planning and cost allocation model							
4.c Refine longer-term operating cost/budgeting model							
4.d Evolve approach to identifying/soliciting external funding sources							
Implement Service Delivery & Pricing Strategies							
5.a Identify service delivery efficiencies and cost components					★		
5.b Develop operating and overhead cost allocation approach							
5.c Refine longer-term operating cost/budgeting model							
5.d Implement detailed pricing model							
5.e Implement clear transparent reporting for internal and external users							
Implement Stakeholder Engagement Strategy							
6.a Develop and resource user/stakeholder engagement model						★	★
6.b Implement user account management program							
6.c Refine user reporting/dashboards							
6.d Continue to evolve stakeholder and public awareness communications							