



# **Road Administration Team**

## **Phase II Final Report**

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## Executive Summary

### Process

Phase I of the Streamlining project resulted in a number of recommendations related to road administration. During Phase II of the project, a Road Administration (RA) Team held a number of workshops and conference calls that focused on mapping a desired road permitting business process. The team then used this process to address the issues raised by the Phase I recommendations from an operational perspective.

### Business Proposals

While each of the proposals presented in this document involves a number of steps, five main concepts stand out:

#### **1. Provincial road permitting process**

While process mapping has been conducted at the district level, an overview of the process, from the licensee's perspective, has not been available. The Road Administration Team prepared a detailed process flow, and documented each step and the accompanying system implications.

#### **2. Standard road naming and usage**

The team determined that the name that the licensee submits for a road in its application should be the one that is used by the Ministry to refer to that road. The licensee should be expected to follow certain Ministry naming guidelines to facilitate exchange of information among government systems.

#### **3. Bundled appraisal/road permit**

Assuming that road appraisal and road permitting processes are interdependent, the processes and supporting systems need to be revisited. The Road Administration Team has suggested how to do this, including a single electronic submission of the appraisal and permit application.

#### **4. Separate tenure from timber mark**

There is a need to generate a blanket timber mark that keeps the tenure number and the timber mark completely separate. Two legitimate permitting models will continue: (1) an individual, geographically-based road permit model, and (2) a "blanket" road permit model, but with geographic subdivisions. This approach uses different numbers in FTA to separate the authority to build or maintain a road from the identification of a timber mark.

#### **5. Cross-boundary road permits**

This proposal would allow a road to cross boundaries, such as those of TFLs and FLs, without requiring a road tenure change. The mantra for this proposal is: "A road is a road is a road."



## Benefits

Both licensees and Ministry staff will benefit from the implementation of the above proposals:

- Provincially-consistent, consolidated road appraisal and permit process:
  - Reduced workload for licensees – bundled submissions
  - Reduced workload for district staff– simplified administration, information exchange, training, and systems development
  - Quicker application processing and ability to track plan/application status
- A rate will be communicated to licensees before harvesting begins
- A consistent road naming convention will eliminate the need for both a legal and a local name
  - Reduces confusion
  - More effective information flow between systems
- Comparisons of planned activities to actual accomplishments will be possible
- Identification of a single authority to build or maintain a road on crown land will make administration easier for both districts and licensees
- Systems will better support day-to-day appraisal and permit processing



## 1.0 Introduction

### 1.1 Purpose of This Report

This document describes in detail the business proposals made by the Road Administration (RA) Team of the Streamlining Project to streamline forest information management at the operational level. These concepts have been developed by operational staff from across the province, in many cases with some degree of verification by licensee staff.

The business proposals in this report were reviewed by MoF engineering staff at a provincial meeting in February 2005, then were subject to a broader province-wide review in April and May 2005. The comments received suggested that no significant changes to the proposals were needed.

A Business Integration Group will work with responsibility centres to implement these and other Streamlining business proposals. In some cases implementation will require further work to understand business needs; in others business proposals can be implemented immediately with the development of an integrated set of tools such as systems, policies, procedures, guidelines, and training.

The Road Administration proposals are now in the first stages of implementation. Requirements gathering has begun for the systems changes described in section 7.

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## 1.2 The Streamlining Project

The Streamlining Project is a collaborative effort between the Ministry of Forests (MoF), the Ministry of Sustainable Resource Management (MSRM, now Ministry of Agriculture and Lands), and the forest industry to streamline forest information requirements and processes, in order to reduce the effort necessary to carry out operational planning work. The project will also improve the tools used to collect, transfer, or report on forest information. The Streamlining Project involves the entire core forest information cycle, from up-front information access for operational plan and appraisal submissions through to free-growing declarations.

This report reflects the completion of the second of three phases of the Streamlining Project. Phase I consisted of information collection and analysis resulting in a suite of recommendations. Phase II involved the further development of these recommendations through improved policies, standards, and business processes. Phase III will shift the focus to developing the tools needed to support the recommended improvements from Phase II. These tools include procedures, guidelines, training, and systems.



### 1.3 Roads Administration Phase I Recommendations

Phase I of the Streamlining project made over 50 recommendations to improve the forest information cycle. Of these recommendations, three applied to road administration (RA):

1. MoF and MSRM should provide licensees with a comprehensive list of standards for all spatial and attribute road-related information submission during the forest management cycle.
2. RTEB to work in concert with Revenue Branch, Forest Practices Branch, MSRM, and industry to develop a standardized road naming convention.
3. A road administration convention must be developed. This should build off the road naming convention. The convention should be independent of the road tenure and whether the road is in a cutblock or not. Subsequent road additions, regardless of tenure, should continue the naming and build off the station information.

### 1.4 Phase II Process

A Road Administration (RA) Team was formed with representation from five different districts and Branch staff. The team members had strong C&E skills as well as hands-on road permit management skills.

The RA Team held a number of meeting and workshops. An MoF Information Management Group (IMG) member participated at some of the workshops. In addition, Andy Oetter and Dona Stapley visited several districts to discuss the challenges and potential solutions.

The team narrowed down the major challenges reflected in the Phase I recommendations as follows:

- Information required from the licensee for road permitting and other related purposes varies between districts and systems.
- Road naming standards vary among licensees, causing administrative difficulties. Industry and the MoF sometimes use different names for the same road, further complicating administration.
- Systems do not adequately support the business processes involved in road permitting.
- With the move to electronic submission, clear standards for submission and distribution of information are urgently needed.

Given the importance of the first challenge, the team conducted several business process mapping workshops to identify the major problem areas and define ways to improve the process for both licensees and districts.



## 1.5 Phase II Key Assumptions

The business proposals recommended by all of the Streamlining teams (Road Administration; Cutblock Integration; Information Access; and Business Process Alignment) are based on the following key assumptions:

- Information will be shared within government where possible.
- The focus is on the business - not the systems.
- Solutions will meet licensee and district operational needs for all licensees - big and small.
- Clarity and integration of the business will enable future systems improvements (transition to full e-business).
- Major business processes will be provincially consistent.
- The comparison of planned, permitted, and actual activity will be possible (C&E, Revenue, Monitoring).

## 1.6 Report Organization

This report is organized in 8 sections. Section 2-6 provide information on the five business proposals. Section 7 discusses some of the systems modifications that will be required in order to implement the proposed changes, and Section 8 outlines the benefits of adopting these proposals.

Although the RA business proposals were based on the Phase I streamlining recommendations, there is not a one-to-one correspondence between the Phase I recommendations and the Phase II business proposals.



## 2. Road Administration Proposal #1: Provincial Road Permitting Process

While road permitting processes have been mapped at the district level, an overview of the process, from the licensee's perspective, has not been available.

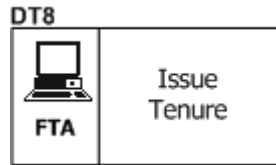
With the move to electronic submission, provincial process consistency (supported by information standards) is emerging as an urgent issue. In response, the Road Administration Team documented a high-level process flow to offer a broad solution, including room for district flexibility (Figure 2.1). Suggestions for changes to the process include the following:

- **Road Administration procedures must be inclusive** of Forest Service Roads, Road Use Permits and Road Permit Roads.
- **Road Administration must include standardized consistent practices** for issuing road permits (ie. geographic) and issuing amendments (additions or deletions) to permits.
- **Require licensees to do a status check (it is currently optional):** To ask for this, the tools required by the licensee to do the checking must be improved, and no cost must be involved.
- **Keep FDP/FSP verification process flow step:** This step should be left in the basic road permit process, though it may not be required when FSPs start to be submitted. Districts may still wish to conduct some kind of validation at this time and the process needs the flexibility to accommodate this.
- **Need option for formal district First Nations review step:** It does not matter if First Nations materials come in at FSP or RP time; systems must allow for attachments to accommodate either. Also, the suggestion in the process flow to provide a tick box indicating whether First Nations issues were checked should be a district option, at least for now. This is related to the FDP/FSP verification process step; FSPs should already have included First Nations review.
- **Treat Special Use Permits (SUPs) just like any other road permit:** Stick to the mantra "a road is a road is a road," but include a toggle in the system that allows districts to identify whether charges are involved. In the meantime, to deal with migration of data among systems, we need the same information for SUPs as we need for any road permit. Our tenures should be amalgamated into one type because there is no real benefit in separating them. In the future, look at the cost-benefit of charging for this.
- **Licensees can track processing status.**

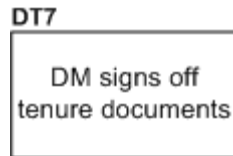
Road Administration Proposals 2 and 3 are also changes that result from taking a coordinated approach to the road permitting process.

**Figure 2.1: New Road Permit Application Process**

**Legend:**



This step involves a system. Each step is identified by a number and further explained in supporting documentation.



Manual process step (does not involve a system). Each step is identified by a number and further explained in supporting documentation.



Decision point—implications of responding yes or no are provided. Decision points are also explained in supporting documentation.



Page connector. Indicates that this process is continued on page 2, at indicator B.



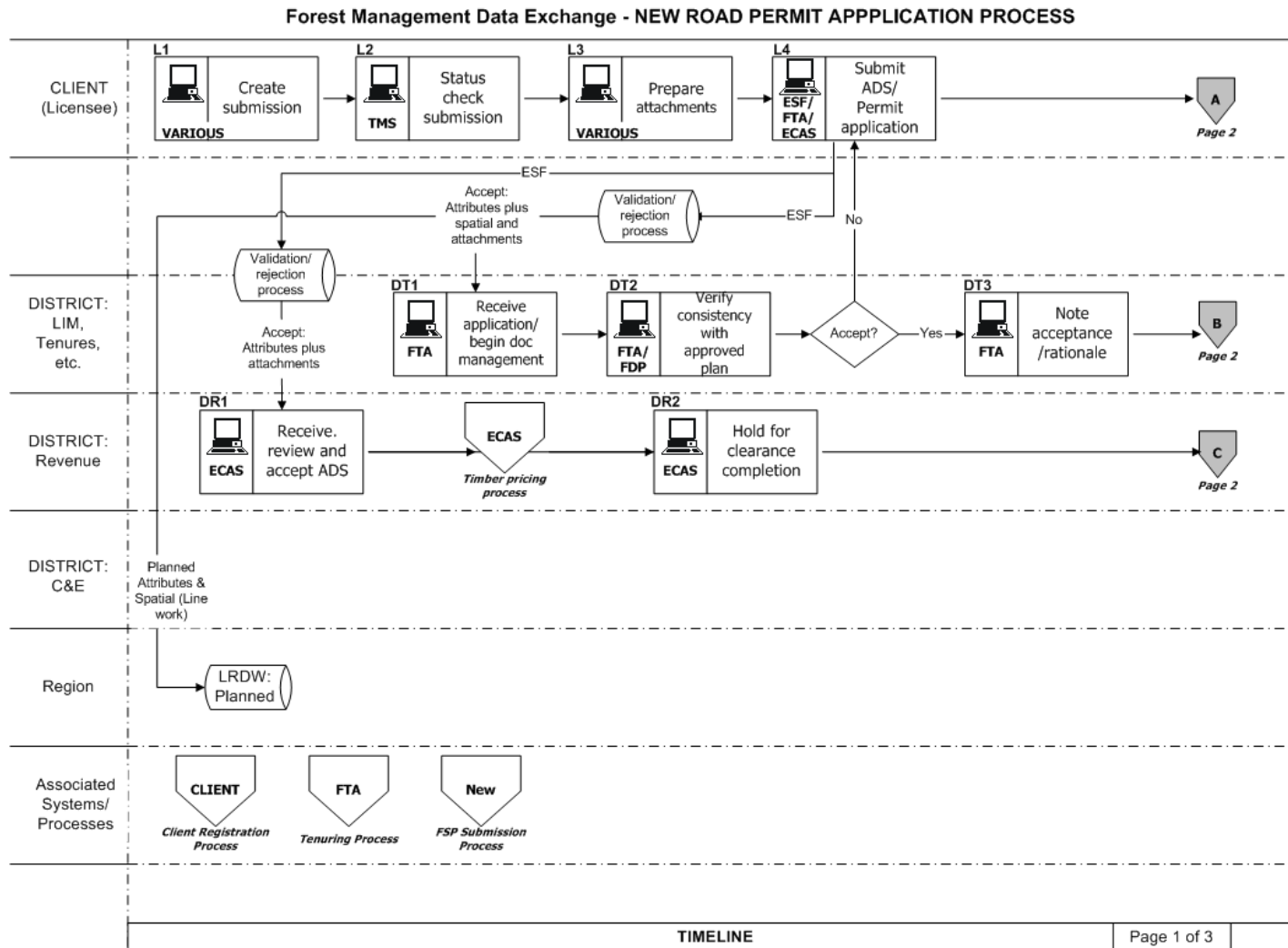
Associated business process, and the system that supports it—in this case, the Risk Evaluation Process, which is managed in CIMS. These processes are further described in supporting documentation.



Database step: automatic, no human intervention.

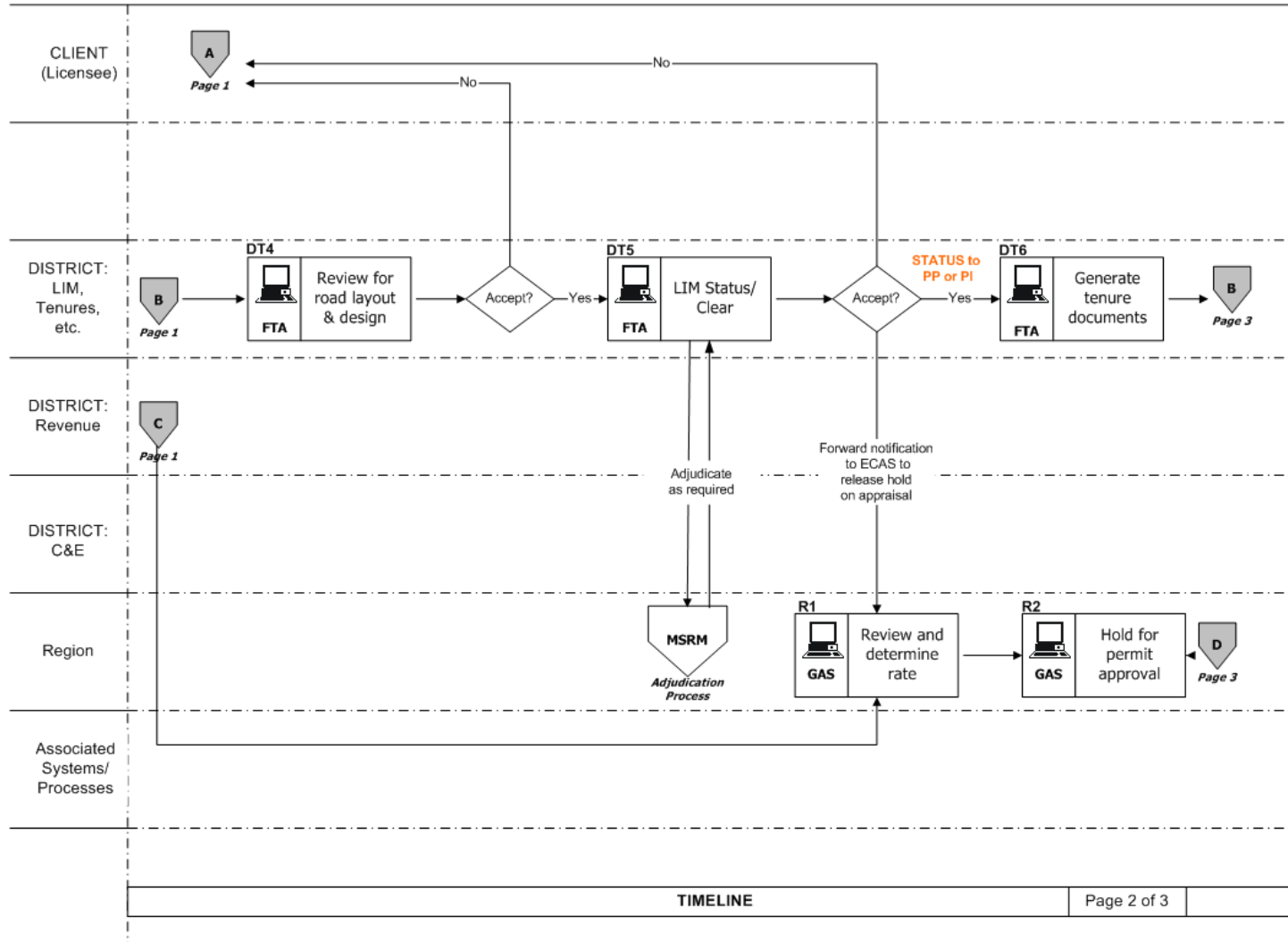


## New Road Permit Application (FTA/ESF) Proposed Business Process Graphic

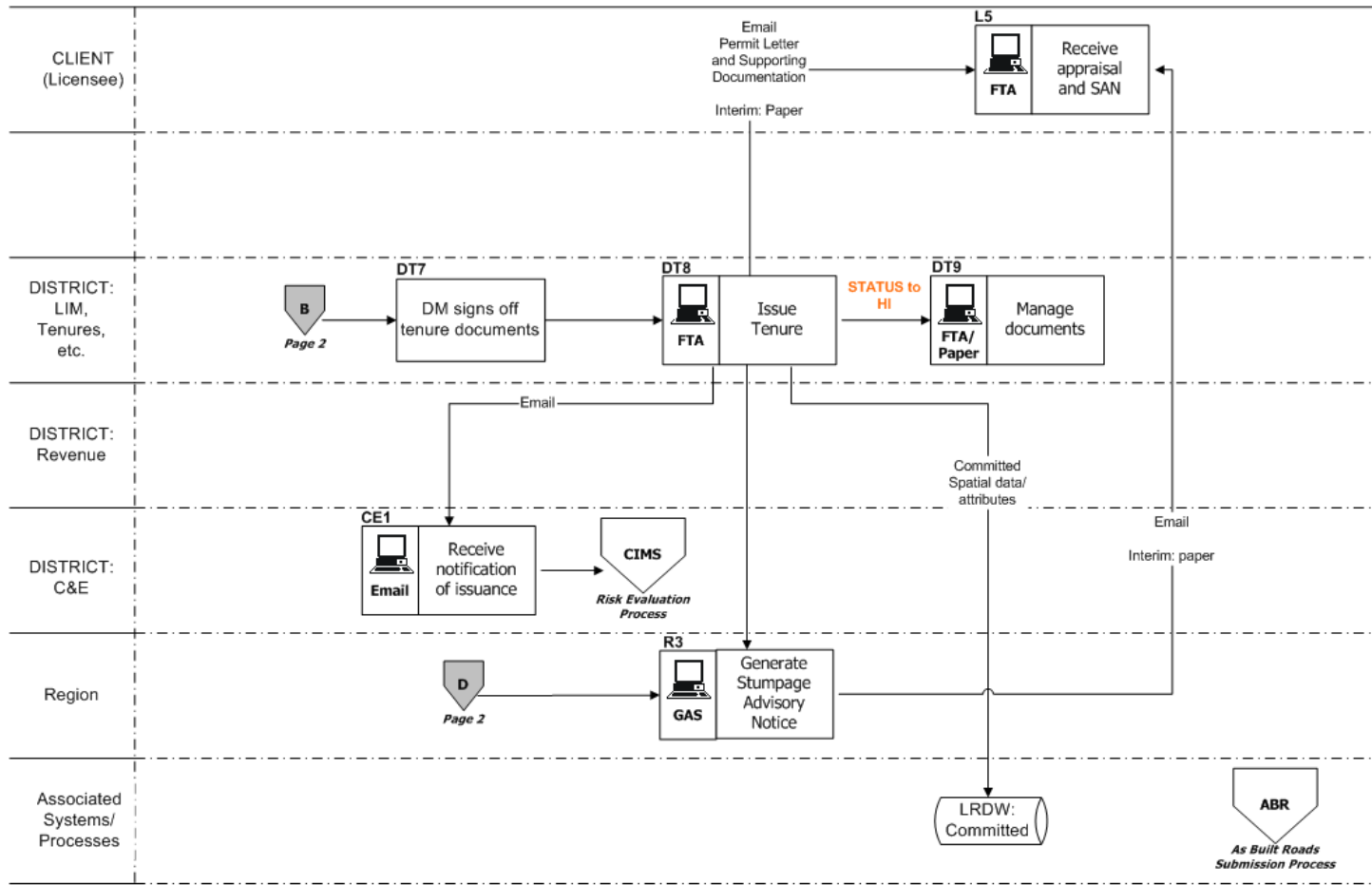




Forest Management Data Exchange - NEW ROAD PERMIT APPLICATION PROCESS



Forest Management Data Exchange - NEW ROAD PERMIT APPLICATION PROCESS





**Table 2.1: New Road Permit Application (FTA/ESF) Proposed Business Process: Step Details**

#	Process Step	Activity Description/Questions	Info Exchange	Changes/Issues to Resolve
<b>Licensee/Client Activities</b>				
L1	Create submission	Using one of a number of systems (GENUS, Inform, etc.), licensees prepare their submission. They could provide a schedule where they fill in the appropriate marks that apply both for an amendment and a new road permit. Road naming guidelines example: 15 characters, discourage punctuation, shorter the better, no spaces, no underscores, discourage decimals. Include Road naming for FSRs.	Various systems (XML/GML)	<b>Major change:</b> Road name used by the licensee is maintained within our systems. Road naming and mapping standards required. <b>Recommendation:</b> Road name in appraisal should be the same as in the application(s). <b>FTA requirement:</b> New schedule idea to be included in the submission.
L2	Status check submission	Licensees currently have the option to use the MSRM tool called TMS to check whether or not the .xml/.gml document they are about to submit through the ESF will be accepted. The tool checks the validity of both attribute and spatial data according to wide range of rules used by ESF. If the test is successful, the client then has the option to view a range of maps of the proposed permit area. This can help determine if there are any status or other problems before the submission goes to the MoF.	TMS (Tenure Map Service)	Though this tool is currently available, there is a cost associated with it, not all required data are available, and the tool itself perhaps needs to be simplified. Need to find a way to get known information to the licensee for this task to be done properly. This is currently an optional process; If the tool is good enough, and cost is not an issue, this step might be made mandatory, not so much to save MoF time (though it should), but to provide a good planning tool for the licensee.
L3	Prepare attachments	All applicable attachments should be able to be submitted electronically along with the rest of the submission, for example: <ul style="list-style-type: none"> <li>road layout and design documentation</li> <li>costing, etc.</li> </ul> In this step, the licensee will create these attachments in a variety of formats (Word, Excel, .xml, .gml, etc.). Spatial data submitted in .gml format as an attachment should be able to be displayed on the map that is required for approval of the submission.	Various systems	Naming and mapping standards required. <b>FTA requirements:</b> Attachments capability.
L4	Submit ADS/ permit application	The .xml/gml file created on the licensee system is sent through ESF to both FTA and ECAS. (ADS = appraisal data submission). The team indicated that since an appraisal map for a new road is not required, and the amount of revenue information required is minimal, the permit application and appraisal submission should be done at the same time. The revenue information would go to ECAS and the map and attribute data would go directly to FTA. Any mapping requirements for ECAS should match those in FTA. If other documents must be submitted, electronic attachments should be permitted, but should not replace the actual submission of attributes that go to FTA and spatial elements that go to the Operational Database and, later, the LRDW.	ESF to FTA/ECAS Mapping standards Required	Naming and mapping standards required. <b>FTA requirements:</b> Ability to use blanket marks; system should know how to link from a licence to the blanket mark. Licensee can choose whether to use the blanket mark. <b>ECAS requirement:</b> ECAS will need to be more closely aligned to FTA to manage this change.



#	Process Step	Activity Description/Questions	Info Exchange	Changes/Issues to Resolve
	VALIDATION/ REJECTION PROCESS	<p>ESF automatically checks the tenures submission file to ensure it conforms to structural and data requirements. If it passes, it will display as an entry in the inbox of the appropriate District staff member. If not, the district receives nothing and the client will receive notification of failure, and will need to re-submit.</p> <p>Once the tenure data are validated, they are sent to the LRDW and identified as "planned."</p> <p>A validation already occurs with the ECAS process; some changes may be required given the suggestion that these processes be more closely linked.</p>	ESF	
L5	Receive permit and SAN	The permit and stumpage advisory notice are received at the same time. In the interim, paper exchange will be required.	Email/Paper	<b>Major change:</b> Currently these documents are sent and received separately.
<b>District (Tenures) Activities</b>				
DT1	Receive application /begin document management	<p>The validated application is received in a tenures person's inbox.</p> <p>The activities that take place at this time may be different for each district. Some may determine that printing the maps and other documents and filing on paper makes sense; others may feel the work could be done electronically. In the long run, and assuming improved electronic communication between participants in the process (and electronic signatures), paper would not HAVE to be printed as often, but there will likely be reasons to do so.</p> <p>Route card begins here.</p> <p>Filing solution needs to address need of field offices to access information without driving to get a paper file.</p>		<p><b>District Review:</b> Need to determine materials actually to come in to help decide if a move to wholly electronic is feasible.</p> <p><b>District Review:</b> Qrms initiation? Necessary in an electronic world?</p> <p><b>District Review:</b> What are the other tools that people use at this time?</p> <p><b>FTA Requirement:</b> FTA should include a robust work planning tool (similar to ECAS)—route card idea</p>
DT2	Verify consistency with approved plan	<p>When the validated permit application arrives, a tenures designate should be notified of its arrival, either in FTA or by email.</p> <p>The Road administration Team agreed that verification of the permit application against the objectives set out in the FDP/FSP should occur at the same time as statusing and clearance procedures. The tenures designate who does this should have full access to the material electronically.</p> <p>This step should also include checking of First Nations issues.</p> <p>When the FSP submission process is confirmed, this validation step may not be required. For future evaluation.</p>	FTA/FSP?	<p><b>FTA Requirements:</b> Checklist tool would be useful, especially to help track the research done at this time.</p> <p><b>MapView requirement:</b> Improved viewing tool.</p>
	DECISION: Accept?	<p>If the tenures designate was not satisfied, the submission would be returned to the client for corrections. Any work that the statusing person has already done in FTA on this application should be able to be saved and retrieved at a later date when re-submission takes place.</p> <p>If rejected, both attribute and spatial data is removed from the LRDW.</p>		<b>FTA requirement:</b> To permit several people to work on the application at the same time, thus speeding up the process, FTA must be able to save the work of each of the participants if one of them rejects the file. Other participants should also be notified when rejection takes place.
DT3	Note acceptance/ rationale	<p>The tenures designate who reviews the submission for consistency with the FDP/FSP objectives would indicate this on the application in FTA (ticky box), and provide a rationale for doing so.</p> <p>This rationale should be made available to C&amp;E.</p>	FTA	FTA needs a new check box and comments field.



#	Process Step	Activity Description/Questions	Info Exchange	Changes/Issues to Resolve
DT4	Review for road layout and design	If applicable, the layout and design of materials provided electronically should be reviewed. A simple overlay on the base map should be both clearly visible and printable.	FTA	<b>MapView requirement:</b> Improved viewing tool.
DT 4/5	DECISION: Accept?	If the road design and layout are acceptable, the application proceeds. If not, it is rejected and goes back to the client. As in other steps, a way should be found that work entered into the system is not lost if this person or others in the process reject the application.  If rejected, both attribute and spatial data are removed from the LRDW.		
DT5	LIM status/clear	The LIM operator will review the application for problems. A clearly readable (and printable) map should be able to be viewed at this time. Access to other "layers" of data, such as Tantalus, etc. (held in the LRDW), should also be available.  If the LIM officer cannot resolve clearance problems, MSRM will be asked to do further research. See MSRM Adjudication Process, below.	FTA, Viewing tool	<b>MapView requirement:</b> Improved viewing tool required.  Easy access to a "layer" that depicts tenure information.  <b>FTA requirement:</b> Have submission disappear from inbox once cleared; send to BCTS as needed; explore idea of clearing submissions from the inbox of the person working on it as it passes through various stages.
DT 5/6	DECISION: Accept?	If the application is acceptable, the status is changed to either PP or PI (depending on tenure type) and the application proceeds. If not, it is rejected and goes back to the client. As in other steps, a way should be found that work entered into the system is not lost if this person or others in the process reject the application.  If someone else is working on the application, he/she should receive notification that it is being rejected.  If rejected, both attribute and spatial data are removed from the LRDW.		<b>FTA requirement:</b> Need to generate notification of rejection to others working on the file. Need to know who is rejecting it, not necessarily why. No data should be lost. Over time we might develop a list of reasons for rejection, or just a comments box.
DT6	Generate tenure documents	FTA should be able to complete a new permit form that almost completely auto-fills for electronic signature. The documentation could be printed, but should be signed electronically.  If required, RLAD should be referenced in this letter.  In the interim, paper documents will be produced using Word.	FTA/paper	<b>FTA requirement</b> to auto-fill form
DT7	DM signs off tenure documents	DM or designate signs the paper documentation.  This is an interim step until full sign-off can occur electronically.	Paper	<b>Policy requirement:</b> Make electronic signatures legal.
DT8	Issue tenure	The application in FTA is accepted, which sets the status to HI. This causes three actions:  GAS is triggered to generate the stumpsage advisory notice and allows inspection activity to begin.  "Committed" data are sent to LRDW.  CIMS receives notification of tenure issuance.  Interim ability to continue to work on paper is required.	FTA/Email/ Paper	<b>FTA requirement:</b> Future automatic signature approval.  <b>FTA/CIMS requirement:</b> Notification of tenures issued.
DT9	Manage documents	Digital preferable to allow access to field staff.  Multiple steps are involved here—to be explored at the district level.	FTA/paper	Research required: Standard amount of information that needs to be accessible digitally should be defined.



#	Process Step	Activity Description/Questions	Info Exchange	Changes/Issues to Resolve
<b>District (C&amp;E) Activities</b>				
CE1	Receive notification of issuance	Automatic notification of issuance of a road licence could be sent to the FOS or the Forest Officer/Official via email.	Email	<b>FTA requirement:</b> New notification process. Need clarification on who should get these emails.
<b>Revenue Activities</b>				
DR1	Receive, review, and accept ADS	District revenue staff receive the ADS in their inbox. They review it and continue with the Timber pricing process until they are ready to accept it, which sends it to region.	ESF/ECAS	Mapping standards required/ electronic submission through ESF.
DR2	Hold for clearance completion	When ECAS appraisal work is complete, the file still cannot go to region unless clearance has taken place. The system should hold the file until the clearance process changes the status in FTA, which should notify ECAS to send to region (or do it automatically, if the systems are ready).	ECAS	<b>New requirement for ECAS;</b> link to FTA to check when the clearance process is complete so that the ADS can be sent automatically to Region for processing in GAS.
<b>Region Activities</b>				
R1	Review and determine rate	Once the application has been cleared, regional revenue staff can receive the appraisal information and calculate the stumpage rate.	GAS	
R2	Hold for permit issuance	The rate confirmation notification should be held until the permit is issued in FTA.	GAS	<b>New requirement for GAS:</b> Hold for status change.
R3	Generate SAN	Once the permit is issued (status change to HI in FTA), the stumpage advisory notice is automatically generated and sent to the licensee.	GAS/Email	
<b>Associated Systems/Processes</b>				
CLIENT		The client must be registered in the CLIENT system before a tenure can be created in FTA, or apportionment data entered in APT.		
FTA: Tenuring Process		A valid tenure must exist in FTA before the road application process can begin.		
New FSP Process		A new electronic submission system will be developed to accommodate electronic submission of the FSP. Details still need to be worked out, but the system design should consider district needs as described in this process flow.		
ABR		Need for link? How to define what is built? They will have to report once built, but how are we defining "built"?		
MSRM Adjudication Process		If there are clearance issues, MSRM resolves them with the client. A required pre-submission clearance procedure should reduce the number of times this process is needed.  MSRM receives the submission in its inbox on those occasions when LIM cannot resolve a clearance problem. The submission will be reviewed by MSRM and returned to the district to either accept or reject, depending on the findings at MSRM.		

## 2.1 Road Permit Amendment Application Process

The process steps involved in an amendment would be very similar to those identified here, except for the fact that no appraisal submission would be made. Once the proposed new process is confirmed, the amendment process will be documented.



### 3. Road Administration Proposal #2: Standard Road Naming and Usage

Road naming standards vary among licensees, causing administrative difficulties. Industry and the Ministry sometimes use different names for the same road, further complicating administration.

Road names should be provided by the licensee and *not* changed in government systems. MoF should, however, provide the licensee with guidelines on how to name roads so that the information flows through Ministry systems efficiently. For example, a reasonable maximum name length should be agreed upon, such as 20 alphanumeric, no spaces or underscores (discourage periods).

Road Administration must include three integrated component conventions for naming (e.g. "Mountain Road"), road tenure (e.g. "R12345") and revenue timber marking (e.g. "EK1RDS").

For BCTS and FSRs, use the section ID number field (currently 01) as the real road name and expand its length (tenure number (0001) is understood) to incorporate the legal road name. Call the field Legal Road Name. If everyone makes the legal name the same, work becomes easier. For BCTS purposes, GENUS does not care about this, just the road name.

A road naming standard for road sections, both for FSR and RP, may need to be considered to minimize the impact/workload in the event of re-assignment, in whole or in part, of road data (e.g. from RP to FSR, or FSR to RP).

The standardized business process flow discussed under Proposal 1 assumes that road naming issues will be resolved.

This proposal is backed by road naming guidelines and standards for licensees, which are currently under development.

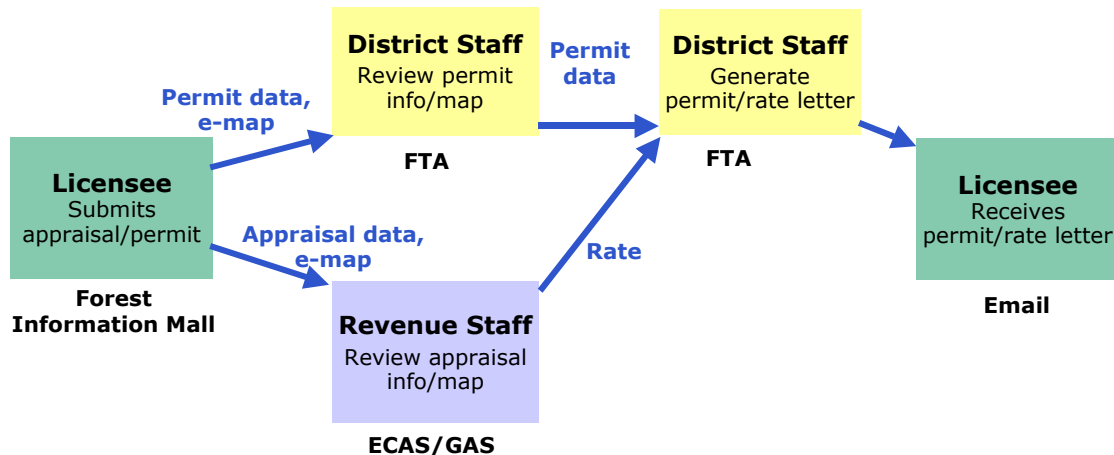
## 4. Road Administration Proposal #3: Bundled Appraisal and Road Permit

Assuming that the appraisal and permitting processes are interdependent, the Road Administration Team felt the FTA/ECAS submission processes could be combined into one step (or as close to one step as possible – with two systems perhaps, but it should be one submission process to the user). Some implications:

- Licensee makes one submission instead of two, with data automatically sent to correct systems.
- A single, electronic map is required.
- Revenue and district staff do tasks simultaneously, not sequentially, with system notifications to support their activities. Systems should also save work done on an application that is rejected so that this information does not have to be resubmitted.
- Licensee receives the rate and permit electronically, at same time.
- Licensee can track processing status.

These changes are reflected and discussed in detail in the business process flow diagram (Figure 2.1). A simple view of this change is also presented in Figure 4.1 below.

**Figure 4.1: Realigning appraisal and permit application submission processes**





## 5. Road Administration Proposal #4: Separate Tenure from Timber Mark

The Road Administration Team determined that there is a need to generate a timber mark that keeps the tenure number and the timber mark completely separate. Such a procedure uses different numbers in FTA to separate the authority to build or maintain a road from the identification of a timber mark. In other words, it better defines the authority to build or maintain the road (important for a tenure, which is a long-term arrangement) from the mark definition (which is only a snapshot in time).

Two legitimate permitting models will continue: (1) an individual, geographically-based road permit model, and (2) a "blanket" road permit model, but with geographic subdivisions.

In an attempt to better understand this concept, the team put together Figure 6.1, which also demonstrates Road Administration Proposal #5 (Section 6).

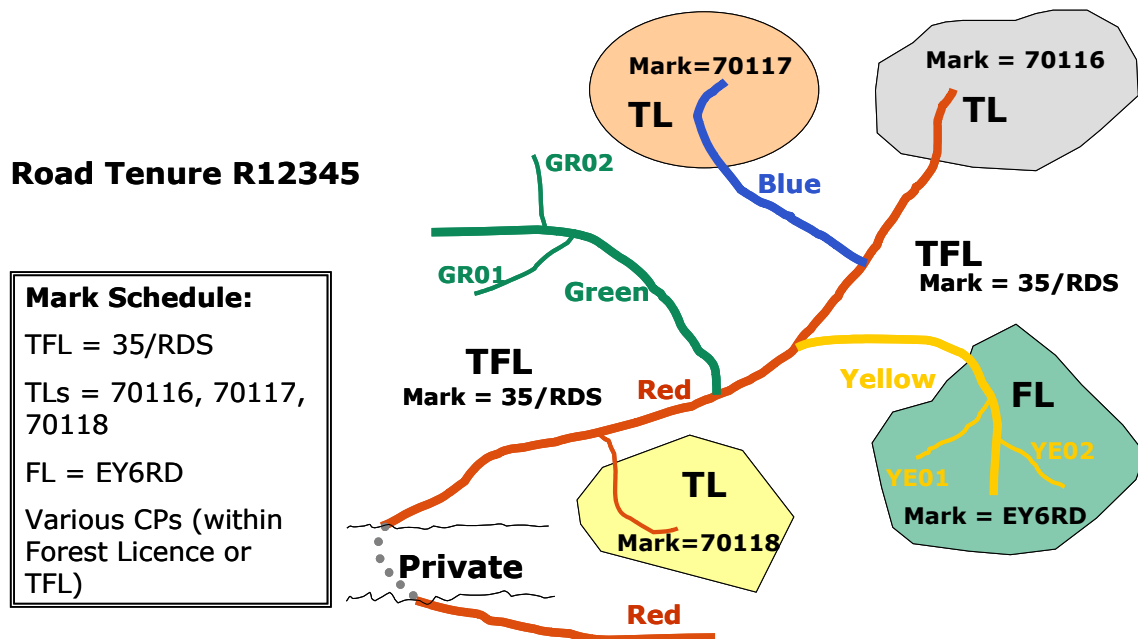
## 6. Road Administration Proposal #5: Cross-boundary road permits

Road tenures/permits should be able to cross boundaries of overarching licenses belonging to a single licensee while remaining a single permit/tenure. Amendments to road permits/tenures should still have the same name, section and stations.

This solution simply follows the existing mapping rules, where an amendment to extend an existing section of road keeps the section ID the same. The change is that the tenure for the road permit will now be able to cross boundaries of overarching licences, such as TFLs and FLs, without requiring a road tenure change. The licensee should have the choice of charging to the CP or the road permit.

This option provides a simplified approach to administration, since road numbers and names will change less often. Further, under this arrangement, the only tenure to build or maintain a road on vacant crown land is a road permit; thus SUP roads would be converted to RP roads.

**Figure 6.1: Cross-boundary road permits; separating tenure from mark.** Road tenure R12345 covers five tenures held by a single licensee. Note the blanket timber mark for the road within the TFL.





## 7. Potential Systems Changes

The business process discussions resulted in a list of changes to FTA and other systems that would result in streamlined information exchange. The following changes were discussed at length:

- **Incorporate C&E notification into the permitting process:** C&E should be automatically notified when road applications are issued.
- **Do not track road statuses in FTA:** The concept of maintenance, construction, and deactivation statuses are no longer valid in legislation. Thus it is not important to track and maintain these statuses in FTA, especially since those who wish to track this data can do it in FRMA. Further, the As Built Road submission process will automatically give the Ministry this information, since licensees will have to report yearly on the roads they have built and those they have deactivated. A road that is built and not deactivated is a maintenance responsibility.
- **Systems need to recognize the FSR as a government responsibility,** and allow designation of an FSR to the segment level as BCTS or Operations Division.
- **RUPs should become legitimate tenures managed in FTA,** primarily because other business areas and systems need more access than might be possible if RUPs are only tracked in FRMA, especially since FRMA is intended as an engineering tool. Another reason is to reduce the duplication of putting RUPs in both FRMA and FTA. There is a need to ensure that each RUP can be tied to an FSR.
- **Keep the concept of road segments:** This concept allows us to do a number of things: to identify different portions of a road that were amended on different dates and track them back to the tenure; to navigate back to the rules of the day if an issue arises; and to designate ownership.

### 7.1 Summary of Potential System Changes, by System

Table 7.1 describes the system changes that would be required if the process flow described in this report is adopted. In the Process Flow Step # column, the step in the process flow that gives rise to the change is identified. Please see the process flow for details (Figure 2.1).

**Table 7.1: Summary of potential system changes**

Process Flow Step #	System Affected	Required Change
L1	ESF/GENUS/FTA	Road naming standards may require modifications in these systems. See RAS-2 (Section 3).



<b>Process Flow Step #</b>	<b>System Affected</b>	<b>Required Change</b>
L1	ESF/FTA	New schedule for submission by client, where they fill in the appropriate marks that apply to the submission. This would apply to both an amendment and a new road permit.
L2	TMS/LRDW	Though this tool is currently available to clients, there is a cost associated with it, not all required data are available, and the tool itself perhaps needs review for ease of use.
L3	FTA/ESF	Require attachments capability, similar to that in ECAS and CIMS/ERA. Need a comments box that will allow users to add information about the attachments that they are including.
L4	FTA	Ability to use blanket marks; system should know how to link from a licence to the blanket road mark. Licensee can choose whether to use the road blanket mark.  Ability to show the overarching tenure(s) associated with a road permit.  Break the link between the RP tenure authority to build or maintain a road and the various timber marks associated with it (a one-to many ratio). A road permit tenure would need to be changed to have a mark schedule similar to the existing cutting permit schedule . See RAS-4/RAS-5.
L4	ECAS	ECAS will need to be more closely aligned to FTA to accommodate a single appraisal/permit application submission. See RAS-3 (Section 4).
DT1	FTA	FTA requires a robust work planning tool, including an Audit Trail, similar to that in ECAS, that mimics the paper route cards in use at the moment.
DT2	FTA	Checklist tool would be useful, especially to help track the research done at various stages in the verification process. The route card and this checklist could be designed to work together to help users figure out who has done what, when, and what is left to do.
DT2/DT5/ DT6	FTA	To speed up the permitting process, we need to allow several people to work on the permit application at the same time. However, if one person in the chain rejects the application, the others must be notified and FTA must be able to save the work done by each of the participants so that when the submission comes in again, work does not have to be repeated.  Over time we might develop a list of reasons for rejection, or just a comments box.
DT2/Decision Making DT4/DT5	MapView	Improved viewing tool is required to ensure that tenures specialists can quickly and easily view the data they need from the LRDW. Tenure-specific layers should be grouped to make them easy to select, display, and remove from view.
DT3	FTA/CIMS	The tenures designate who reviews the submission for consistency with the FDP/FSP objectives would indicate this on the application in FTA (ticky box), and provide a rationale for doing so. A new ticky box and comments area are thus required. (This may be an interim step because we may find that it's not going to be Ministry staff who will review it –the licensees will do it.)  This rationale should be made available to C&E.
DT5	FTA	Submissions currently rest in inboxes throughout the whole review process; need to explore a way to remove the submission from the inbox when the individual's work is done. This would be helpful in multiple steps but particularly in this one, where the LIM officer is clearing the submission. Alternatively, a filtering mechanism would be a good option as well.
DT6	FTA	Need ability to auto-generate tenure documents, including the permit application issuance letter. The content of the letter should be drawn directly from the database.
DT8	FTA	Need to change wording of Approve buttons to Issue.
DT8	FTA/ECAS	Ability to automatically email the tenure letter to the client when the Issue button is selected in FTA. Ability to coordinate issuance of the permit with that of the SAN (stumpage advisory notice) that is generated in ECAS.
DT8/CE1	FTA/CIMS	CIMS/appropriate C&E officers should be notified when permits are issued.
DR2	FTA/ECAS	ECAS requires a link to FTA to check when the clearance process is complete so that the ADS (appraisal data submission) can be sent automatically to region for processing in GAS. (Currently, staff have to keep checking manually.)



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<b>Process Flow Step #</b>	<b>System Affected</b>	<b>Required Change</b>
R2	FTA/GAS	<p>GAS needs to be able to receive the appraisal information, once the application is cleared. Then, once the region has done its work and approved the stumpage rate, the system needs to await notification from FTA that the application has been issued and the status changed to HI. At this time, the SAN would be generated and sent automatically to the client in an email.</p> <p>[Needs further research: If for some reason the appraisal work has not been completed, the SAN is not automatically produced and sent.]</p>

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## 8. Conclusion

### 8.1 Benefits

Both licensees and Ministry staff will benefit from the implementation of the above proposals:

Benefits to the licensee:

- A standardized road permit process across districts will reduce workload for licensees who work in multiple districts.
- Realigned appraisal and permit processes, supported by integrated systems, will speed up these processes and prevent the current problem of beginning harvesting without knowing the stumpage rate.
- One map and a single submission activity for both appraisal and permit data will simplify information exchange.
- A consistent road naming convention will reduce confusion—roads named by licensees will no longer be changed in Ministry documentation.
- Identification of a single authority to build or maintain a road on crown land will make administration easier.

Benefits to district and other Ministry staff:

- A standardized road permit process across districts will facilitate staff training.
- Realigned appraisal and permit processes, supported by integrated systems and including work flow management tools, will make both tasks easier to complete.
- A consistent road naming convention will allow information to flow more effectively between systems.
- Identification of a single authority to build or maintain a road on crown land will make administration easier.
- The systems changes proposed by the Road Administration Team (consistent road naming, single standardized map) will facilitate information exchange and the comparison of information about planned activities to information about actual accomplishments.
- A revised timber marking procedure would eliminate confusion—for both people and systems—by separating the tenure for authority to build or maintain from the location where the timber is returned. It would also better define the authority to build or maintain the road (important for a tenure, which is a long-term arrangement) from the mark definition (which is only a snapshot in time).