

Fuel Import Non-Tariff Measures - An Impact Assessment

for

Department of Standards and Metrology Ministry of Science and Technology



FINAL REPORT

September 2018



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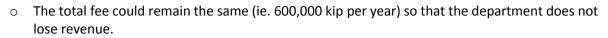
1 Summary and conclusions

- Broadly, the NTMs require obtaining an annual quality certificate per businesses and then document checking, testing and a secondary quality certificate at the border per shipment.
- Interviewees report that procedures at the border broadly follow those laid out in the Lao Trade Portal. According to checkpoint officials, inspections by DSM are typically conducted concurrent with Customs. However, not all businesses follow the procedures, which can lead to delays. Some businesses avoid the NTM procedures entirely.
- 100% of fuel import shipments are tested, however it is suggested that Lao PDR begin to follow international best practice and instead test 1-5% of imports on a random basis.
- Ministry officials stated that around 12,000 fuel import certificates are issued at borders per year. Customs import data suggests that over 9,600 certificates should be issued.
- Costs of the NTMs are high. The secondary quality certificates issued at the border are the costliest element of the NTM process. Labor costs of time spent at the border are also significant. However, a service charge (that is not listed in the relevant NTM) swamps all other costs and totals over 34 billion kip per year. See section 4.9.1 for details. The risk rating for fuel imports is assessed as medium. Approximately 70% of fuel imports are licensed, so the NTM regime is not 100% effective at mitigating risks from unlicensed imports.
- The effectiveness of the NTMs is not strong, and the costs are large given the risks they seek to mitigate.
- Diluted fuel being sold in petrol stations within Lao PDR was identified by a number of stakeholders to be a past issue and ongoing risk. However, this possibility is not related to regulations on fuel imports. Any action to test, prevent, or respond to cases of diluted fuel sales in Lao PDR must be dealt with by other means, and is not within the scope of this legislative review of NTMs.

ID	Measure name	Recommendation	Reason
387	Quality Certification – fuel	Amend	Costly given risks, change from annual to 3 or 5 years
130	Certification – controlled goods	Amend	As per NTM 387
551	Quality Certificate from exporting country	Retain	Ensures quality of imports
554*	2nd Quality Certification	Repeal	Not effective given risks, and registration (NTM 387) is sufficient
552	Inspection requirement	Amend	Risk-based inspection by Customs officer
553	Testing Requirement	Replace	Expensive given risks. Replace with testing at warehouse not border
554	Fee of Quality Certification	Amend	Remove fees for NTMs 554* being repealed
543	Inspection requirement - controlled goods	Amend	As per NTM 552

2 Recommendations

- Review the term annual quality certificate with a view to extending it. It should be possible for it to be valid for 3 years, or even 5.
 - We understand annual certification is related to annual quotas and distribution plans. These quotas are being removed or changed. This change will help enable an extension of the term of the quality certificate.



- This Quality Certificate, and other documentation, should only have to be presented once at the border. Multiple presentation of documentation should not be required. It is not clear why documents should be presented twice (it is not a requirement).
- The need for obtaining a secondary quality certificate at the border does not seem warranted. If the company is already licensed to import the product (via an annual permit from the central authority), the requirement for a second certificate at the border is difficult to justify. Only 1-5 % of Fuel imports should be tested on a random basis.
- Testing at the border should also be abolished, and replaced with a system of testing at warehouses. This would speed up border processes and significantly reduces costs. It also removes the need for specialized staff and equipment at each checkpoint, reducing costs for MOST. Furthermore, there are safety concerns associated with testing fuel at crowded border checkpoints. Fuel testing is most commonly done in relatively isolated areas to reduce the risk of damage or injury in case of accidents.
 - Testing should follow a risk-based approach. The high costs of testing 100% of imports appear difficult to justify given low to medium risks. Authorities can have 95% statistical confidence that 2.5% of goods do not match standards by sampling a fraction of shipments (for a population of 12,000 shipments, about 1,400 shipments would need to be tested). International practice is to test around 1% of shipments for low risk goods, and 5% for high risk.

Other comments from interviewees suggest that:

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- Customs officials should always ensure the importer has the Quality Certificate, particularly at smaller checkpoints. Apparently not all provinces follow the same procedures and fees.
- Some DSM official spoke of the need for technology (and online forms) to ease the documentation burden. Above we suggest it can be handled by Customs and ASYCUDA.
- One importer requested a One Stop Service approach and electronic system for documentation.
- Officials in some locations complained that brokers need better training or information and this would speed up processes.

3 Benefits and costs of change

Streamlining NTMs and improving transparency would have significant benefits. If the recommended changes are enacted, these recommendations will realize the following benefits and costs.

- Improved business certainty and government transparency, improving Lao PDR's international competitive rankings and ease of doing business rankings.
- Reducing the frequency of the annual quality certificate could save importers a few days' work per year (but no fee reduction).
- Average savings in time and cost per import shipment of around 30 to 60 minutes and 35,000 kip (for Secondary Quality Certificate) directly related to no longer requiring Secondary Quality Certificate at the border.
- Per shipment savings of 25,000 LAK and 1 hour at the border from no longer testing at border. This equates to total annual savings of 241 million LAK and 360 days if implemented using a risk-based approach to testing and testing is done at warehouses rather than at border checkpoints (assumes



total testing takes the equivalent of 40 days per year, rather than 400). Similar loss of revenue to government.

Lower compliance costs should encourage more legal imports, improving trade statistics and more accurate data collection.

4 NTM Analysis

4.1 Background

Data used in this review comes from:

- Lao Trade Portal;
- Trade data supplied by DIMEX; and
- Interviews conducted in May 2018. Interviews were with officials in Vientiane from the Department of Standards and Metrology; interviews with officials at the Provincial Departments of Science and Technology in Khammouan, Savannakhet, and Champasak; officials from the Petroleum Inspection Units at border checkpoints in Khammouan, Savannakhet and Champasak; and importers and brokers that use these checkpoints (as well as the checkpoint at Friendship Bridge 1 in Vientiane). Annex B provides details of these interviews.

4.2 The NTMs

Fuel is listed as a "controlled product" by the Department of Standards and Metrology of the Ministry of Science and Technology. Controlled products require a technical inspection before the goods are cleared for import.¹

The terms of reference for this Impact Assessment listed nine NTMs to be examined (Table 1). These govern aspects of the importation of fuel into Lao PDR under the Ministry of Science and Technology.² These measures involve certification, inspections and testing. Their intent appears to be to ensure imported fuel meets Lao National Standards.

ID	Measure	Description
130	Certification	For certain goods listed in a controlled goods list (e.g. fuel, cement and other construction material, electrical goods, etc.) it is necessary to obtain a Certificate of Quality prior to importation from the Ministry of Science and Technology, Department of Standards and Metrology.
387	Certification	Imported fuel shall obtain a quality certificate from the Department of Standards and Metrology, Ministry of Science and Technology.
551	Certification	To import fuel, the quality certificate issued by exporting country (not over 6 months) shall be attached with application form to obtain quality certificate from the Department of Standards and Metrology, Ministry of Science and Technology.
388	Designated Border	Importation of fuel may only take place at designated border posts and importer must have warehouse in the same province.
552	Inspection	Imported fuel needs to be inspected on the volume and selection of sample by Standard Inspection Officer at border post.
553	Testing	When the importation arrives at border, Standard Inspection Officer at border post must collect some samples of imported fuel to conduct quality test before issuing the quality certificate for importation.
543	Inspection	For certain goods listed in a controlled goods list (e.g. fuel, cement and other construction material, electrical goods, etc.) it may be inspected by officer from the Ministry of Science and Technology, Department of Standards and Metrology at the border checkpoint or storage site.

Table 1: NTM descriptions

¹ Other controlled products include cement and other construction materials, and electrical equipment.

² There are other NTMs covering fuel imports, such as those around distribution, refining and import quotas administered by the Ministry of Industry and Commerce. They are not the subject of this Assessment.

554	Fees and Charges	Fuel importers have to pay fee and service charges of quality certification as following: Fee: Quality certificate = 30,000 kip/time; Service charges: Application form = 5,000 kip/form, and the quality inspection = 600,000 kip.
554 new	Certification	For Fuel, a second Quality Certificate is required at the Border.

Source: Lao Trade Portal

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The NTMs cover crude and condensate petroleum, natural gas and other petroleum gases, diesel, aviation fuel, kerosene and other petroleum fuels and oils (see Annex C for a full list of the products covered, by HS Code). In 2017, 4,997 billion LAK of products affected by these NTMS were imported into Lao PDR.

The Decision on Management, Inspection and Certification of Fuel's Quality in Lao PDR (no. 0541/MOST, 8 June 2016) outlines:

"a principle, regulation and measure on management, inspection and certification of fuel's quality that is produced, imported, exported, refined and distributed in Lao PDR on the basis of complying with regulations, principles and national standard that are consistent with regional and international practices aiming at promoting service quality and that is in accordance with actual circumstances and contributes to the national socio-economic development." (Article 1)

This Decision states that:

"Fuel quality inspection aims at strengthening quality and efficiency on socio-economic development relating to fuel management, services and consumer protection" to "assure safety on health and environment, and fuel energy security" and "ensure consistency with the national standard, reality and ability to implement quality inspection on fuel". (Article 5)

Therefore, the risks this NTM group seeks to address are related to health and safety and protection of the environment (these risks are also mentioned in the *Regulation On the Quality Inspection of Goods*, No.1226/PMO-STEA, 17 July 2009). Section 4.8 discusses risk in more detail.

The relevant laws establishing the NTMs are listed in Annex A.

4.3 Import data, 2017

To examine the value of goods, number of shipments and number of companies affected by the NTMs, we used 2017 trade data provided by the Ministry of Industry and Commerce. This lists every trade shipment, including each shipment's HS Code, Regime Code and Tax Code.³ We then filtered import shipments by the HS Codes subject to the NTMs.

The Lao Trade Portal lists 27 HS Codes for this NTM group. Total imports into Lao PDR in 2017 of goods under these HS codes, as well as the number of transactions and the number of companies involved, are shown in Table 2. MoST officials state that 18 companies are registered to import fuel into Lao PDR.

Products	Value of goods (LAK)	Number of transactions	Number of companies
Fuel	4,997,052,555,947	12,146	18

Table 2: Lao PDR Imports, 2017

Source: Ministry of Industry and Commerce, MoST officials.

Annex C lists all the products covered by these NTMs by their 10-digit HS Codes, as listed in the Lao Trade Portal. However, the data in Table 2 also include transactions recorded under the equivalent 8-digit code.⁴

³ HS Codes refer to the international *Harmonized System* of classifying traded products.

⁴ Around 78% of the relevant fuel import transactions are recorded by an 8-digit code.



4.4 Procedures

Before importing fuel, a Quality Certification from the Department of Standards and Metrology (DSM) must be obtained (Figure 1). Quality Certifications can be issued in Vientiane or in the provinces by the Provincial Department of Science and Technology. This involves:

- 1. The importer prepares the application and supporting documents, including:
 - Application letter;
 - Copy of Company Registration/Incorporation Certificate;
 - Copy of permit documents for produce, import, export, and processing petroleum;
 - Quality Certificate from exporting country (must be less than 6 months from the certificate date);
 - Other supporting documents (if necessary).
- 2. The importer submits the application at DSM.
- 3. DSM official reviews application:
 - If the application is correct and completed, DSM will issue the quality certificate within 3 working days.
 - In the case of incorrect application, DSM will inform the importer within 5 working days to resubmit the application.
- 4. When the application is complete and correct, DSM issues the quality certificate.
- 5. Importer pays a fee of 600,000 Kip.
- 6. Importer collects the quality certificate at DSM.



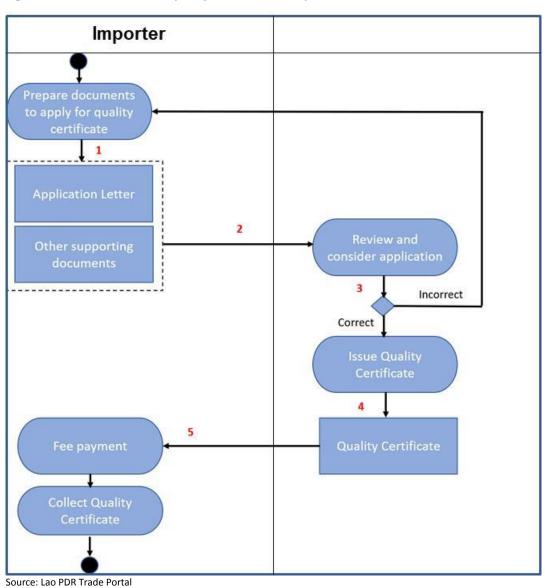
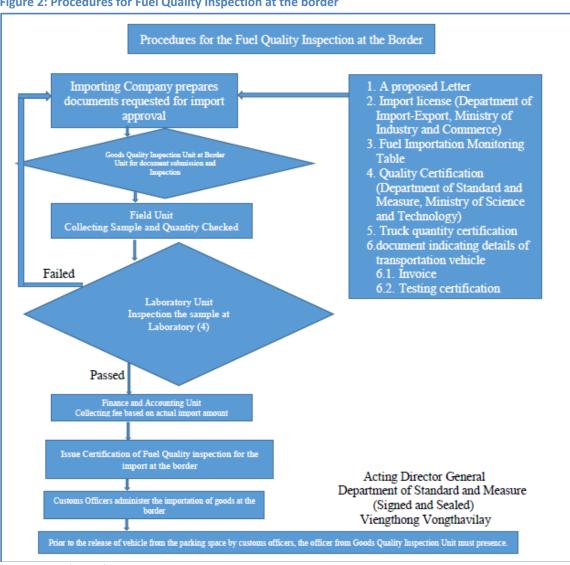


Figure 1: Procedure to obtain quality certificate for imported fuel



This above process is undertaken once per year. At the border, for every shipment the importer submits the quality certificate along with other required documents (Figure 2).





Source: Lao Trade Portal

The sampling and testing is done for every shipment. Checkpoint officials state that if a shipment does not meet the required standard that they will seize the shipment and contact their central department; sometimes instead they will refuse the shipment entry and send it back. However, officials stated it is very rare to find fuel that is not to standard.

According to officials, businesses complain that the procedures are complicated. Sometimes there are errors in documentation, sometimes businesses misunderstand the documentation requirements. DSM says they run annual workshops across the country to explain the import regulations. Some DSM officials stated that businesses don't want to follow all the procedures.

4.5 Actual processes

Interviewees reported that procedures match those of the above diagram. Trucks must also be completed stopped for 15 to 30 minutes to allow their engines to cool before procedures can be implemented. In addition, officials at the border checkpoint in Vientiane stated that shipping staff submit documentation in advance via cell phone.



At the Khammouan checkpoint, officials stated that the following information (in addition to that in the Figure above) are required:

- the Fuel import schedule
- the certificate of quantity
- location of warehouse
- tax certificate
- business license
- valid enterprise registration.

Similarly, officials at the checkpoint in Savannakhet require the following additional documentation:

- import schedule
- fuel quantity schedule
- certificate of experiment from the origin country
- valid enterprise registration (for 1 year)
- tax certificate (for 1 year)
- certificate of fuel quality from the origin country.

One trader in Vientiane outlined 7 steps involved in the procedures at the border:

- 1. Broker from Thailand prepares documents for broker in Lao PDR such as invoice, COQ, Carriage document;
- 2. Lao broker prepares the letter for the Standard and Measurement unit, and Customs on Importation checkpoint attached invoice, COQ, Carriage document to get Certificate of Landing (CL);
- 3. Wait for inspection unit to test petrol in each truck, then they will issue certificate of quality for importer;
- 4. take COQ and attached IM4 document to ASYCUDA system;
- 5. once finished registering in ASYCUDA, then submit the form to the head of import unit for approval;
- 6. pay tax by smart tax, then seek approval from a director of the checkpoint;
- 7. take all documents to Thanaleng to get approval from a director of Thanaleng warehouse then a director will make assignment letter with the technician responsible for inspection before the truck released from parking area.

The trader states that the above requires 4 technical staff to sign and complains this takes too long (1 hour or more. Times are discussed further below). Further, the procedures require the director of the checkpoint and a head of unit to sign. Parking at checkpoint also an issue. Sometimes technical staff difficult to find truck.

4.6 Number of certificates

The total number of companies registered for fuel imports with MoST was 18. The Petroleum Inspection Units at Friendship Bridge 1 said that 50 fuel quality certificates are issued per day – if this is per working day, it is about **12,000** per year.

• 2 provinces provided figures on the number of quality certificates they issue: Khammouane says it issues 10 per week, while Luang Namtha says there are no fuel imports. 2 provinces (Champasak and Savannakhet) did not provide data.

In 2017, according to Customs data, there were 12,146 import transactions of fuel (under the relevant HS Codes) into Lao PDR. However, multiple transactions can form part of one Customs declaration, and one certificate can have up to 4 HS Codes on it. Therefore, we assume that any Customs declaration with 4 or fewer lines is 1 certificate; and that declarations with more than 4 lines requires 1 license for every 4 lines and an additional certificate for any remaining lines.

This results in an estimate of **9,623 import licenses**. This is the number of licenses that *should* have been issued given the number of Customs declarations⁵.

⁵ It likely under-estimates the number of necessary licenses because many declarations may need 1 license per line.



4.7 Time

To obtain the annual quality certificate in Vientiane officially takes three days. Traders state that it can take up to week. At the border, inspecting and approving documents takes 20 to 60 minutes, while fuel testing and inspection takes up to an hour (see Table 3).

Table 3: Day	is to i	obtain	certificate.	clear	border
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Days to Obtain and Use	Time
MoST Vientiane - time to issue Quality Certificates - from officials	3 days
MoST Vientiane - time to issue Quality Certificates at HQ – from traders	Up to a week
MoST at border - document inspection and acceptance at border - official	20 mins
MoST at border - document inspection and acceptance at border - trader	25-60 mins
MoST at border - Quality Certificate testing and inspection at border- official	5-30 minutes
MoST at border - Quality Certificate testing and inspection at border – trader	1 hour
Customs at border - Time to Clear	30 mins

Officials at some checkpoints visited stated that they cooperate with Customs for inspections, so that Customs' requirements are done concurrently. However, a Vientiane checkpoint official commented that there is some duplication of their work by Customs. One trader noted that in addition to 1 hour for DSM procedures, subsequent Customs procedures then add another 30 minutes.

In Savannakhet, officials stated that according to the One Stop Service system documentation checking and product inspection should be conducted with Vietnamese authorities in order to save time for the business operators. However, they note that businesses complain that Vietnamese document checking is very slow.

Testing times can vary depending on the test outcome. At Champasak officials said they combine samples from each tank in the truck (trucks typical have 5 tanks) and test this combined mixture. If it is found to be low quality, they will then re-sample and test each tank individually to locate the problem. Each sample take 10 minutes to test. They estimate an average of 30 minutes per shipment.

Officials also note that the process takes longer when the business does not have the correct documentation. Waiting times would be reduced if businesses' documentation is correct at the outset.

Officials in Vientiane stated that 18 companies are licensed to import fuel into Lao PDR.⁶ We can combine this with the above times to estimate a total annual time to obtain fuel quality certificates in Vientiane (Table 4).

Given that 100% of (licensed) fuel imports are tested⁷, it is similarly possible to estimate total annual time at the border from the above times and the estimated number of licenses.

	Number	Time	Total time per year (days)	
			Minimum	Maximum
Annual Quality certificates	18	3 – 7 days	54	126
Border processes	9,623	0.5 – 2 hours	253	1012
Total days			200	802

Table 4: Total annual time

⁶ Customs trade data records 81 unique company names importing products under the HS Codes covered by these NTMs. This overstates the number of companies.

⁷ Officials in Vientiane estimate that around 70% of total fuel imports are licensed. They are aware of 7 companies that import without a Quality Certificate, usually through smaller border checkpoints.



Source: EMC estimates based on interviews and trade data

However, this estimated time for annual certificates is the elapsed time to obtain the certificate. Staff (government and shippers) reported that it is not necessarily working all that time on this NTM. Whereas border times do mostly involve staff productive time (drivers waiting at the border are still being paid for that time).

4.8 Risk analysis

A risk-based approach was taken to assessing the impact - positive or negative – of retaining, modifying or removing the NTMs in question. The first task was to identify the risk(s) the NTM group seeks to address.

Risk was then assessed in terms of Possibility (likelihood) of the risk occurring and Severity, where severity may be treated as the impact of the risk, should it occur. The following matrix was used to estimate the Raw Risk Score.

	Severity of Impact						Risk Rating for
Possibility of Event	Very Low 1	Low 2	Medium 3	High 4	Very High 5		NTM
Very Low 1	1	2	3	4	5		Very Low (1-5)
Low 2	2	4	6	8	10		Low (6-10)
Medium 3	3	6	9	12	15		Medium (11-15)
High 4	4	8	12	16	20		High (16-20)
Very High 5	5	10	15	20	25		Very High (21-25)

Figure 3: Risk Matrix - Possibility vs Severity

Unsafe fuel could have a quite severe impact if it were unstable or ignited somehow, or resulted in vehicles or machinery exploding. However, fuel that merely doesn't meet the stated standard has a much lower potential impact (minor damage to an engine for example).

On the face of it, the possibility of events seems low. Officials at one checkpoint said that only 1 or 2 times a year might a shipment be below standard (and speculated that this was possibly because the tank wasn't cleaned thoroughly enough prior to loading). Another checkpoint said it had never encountered unauthorized products. However, officials suggest there are substantial illegal imports of fuel, the quality of which is unknown. Hence, the possibility of an event for *all* imported fuel might be higher than low.

We estimate the combination of these results in a rating of 12 – high severity and medium possibility. This is considered a *Medium* rating. A risk rating of *Medium* indicates that the risk of not testing fuel quality may not justify highly expensive or intrusive risk controls. Efforts to reduce illegal imports (by reducing the costs of importing officially, for example) might increase the proportion of total imports that have a low possibility of event, and so even further justify reducing or removing expensive controls.

4.9 Risk mitigation

Once the raw risk rating was assessed, the current mitigation for that risk was compared to the costs of intervention.

The current NTMs do help to reduce the risk rating of fuel imports somewhat. However, they are not entirely effective and they involve significant cost. Non-licensed fuel imports are large (as much as 30% of total

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imported fuel by volume), reducing the effectiveness of the NTM regime. At some borders officials mentioned a lack of qualified staff and the necessary equipment to effectively implement the NTMs.

Furthermore, the current degree of sampling and testing (100% of licensed imports) is not justified by the risk the NTMs seek to address. Sampling and testing fuel is itself dangerous, particularly if the checkpoint has inadequate equipment and safeguards. So there are also *added* risks to testing, not merely risk mitigation.

4.9.1 Costs

Table 5 illustrates total official fees for these NTMs. All officials and traders outlined official fees as per NTM 554. There is the annual fee of 600,000 kip per Quality Certificate issued in Vientiane. At the border the fee is 35,000 per vehicle for the Quality Certificate, plus 5,000 kip per tank seal.⁸ Trucks typically have 5 tanks.

Table 5: Total official fees

	Number	Fee	Total cost (m LAK)
Annual Quality certificates	18	600,000	10.8
Border quality certificate	9,623	35,000	336.8
Border testing	9,623 x 5	5,000	240.6
Total cost			588.2

Source: EMC estimates based on interviews and trade data

The above does not include fees for procedures not covered by these NTMs, such as annual charges for MolC processes and documentation that, according to some traders, total 437,000 kip, and border charges for Customs, warehousing, and road fees, which traders say add another 310,000 per vehicle.

The total costs of the NTM is the cost of the fees, plus the labor costs. Using the data in the tables above and an average wage of 85,000 kip per day, we estimate labor costs of these NTMs at 54 million kip. Of course, total labor costs are higher than this estimate because employers must also pay overheads on top of salary.

Table 6: Total labor costs

	Days	Wage	Total cost (m LAK)
Total cost	632	85,000	53.8

Source: EMC estimates

Therefore, total cost of fees and labor is 642 million LAK.

Table 7: Total costs

	Cost (m LAK)
Official fees	588.2
Labor costs	53.8
Total cost	642.0

Source: EMC estimates

Note that no interviewees mentioned informal payments.

Other costs in addition to those above that this review does not estimate include:

- added incentives to smuggle;
- Lao PDR businesses less internationally competitive because of higher fuel prices. This is also a barrier to international investment;

⁸ Officials at one checkpoint said it was 30,000 for the Quality Certificate and 5,000 for documentation, but the total is the same.

• Other economic efficiency losses and distortions because of higher fuel prices.

4.9.2 Conclusion and alternative risk mitigation proposal

Overall, the current NTMs regime is judged ineffective as a risk mitigation strategy. An alternative risk mitigation regime:

- 1. The need for obtaining a secondary quality certificate at the border does not seem warranted. If the company is already licensed to import the product (via an annual permit from the central authority), the requirement for a second certificate at the border is difficult to justify. Customs should enter the company's annual license/certificate number into ASYCUDA, along with other relevant data such as Regime code. From this data the company's total imports under its license can be tracked by the authorities. The second license becomes superfluous. The need for data collection by DSM is not clear.
- 2. Testing at the border should also be abolished, and replaced with a system of testing at warehouses. This speeds up border processes and reduces costs. It also removes the need for specialized staff and equipment at each checkpoint, reducing costs for MOST. Furthermore, testing should follow a risk-based approach. The high costs of testing 100% of fuel imports is difficult to justify given low to medium risks. Authorities can have 95% statistical confidence that only 2.5% of goods do not match standards by sampling a fraction of shipments (for a population of 12,000 shipments, about 1,400 shipments would need to be tested). International practice is to test around 1% of shipments for low risk goods, and 5% for high risk.
- 3. The term of the annual quality certificate should be extended. Rather than annual, this certificate could be valid for 3 years, or even 5. We understand annual certification is related to annual quotas and distribution plans. These quotas are being removed or changed. This change will help enable an extension of the term of the quality certificate. The total fee could remain the same (ie. 600,000 kip per year) so that the department does not lose revenue.



Annexes

A. NTM Laws

Relevant legislation related to the fuel and under the purview of MoST are:

- Decision on Management, Inspection and Certification of Fuel's Quality in Lao PDR (no. 0541/MOST, 8 June 2016)
- Procedure for Fuel Quality Inspection at Department of Standardization and Metrology, Border Checkpoint, Storage, Gas Station, and Procedure for Service Fee Collection of the Fuel Quality Inspection (no. 0952/MoST.PS, 28 July 2016)
- Decision on the Management of Fuel Dispensers in Lao PDR (No. 0608/MOST, 26 May 2017)
- Decision on the Management of Fuel Trucks in Lao PDR (No. 1397/MOST, 27 December 2016)

MoST officials also said they are guided by:

• Decision on Inspection of Product Quality (No. 1226/PM Office - National Science and Technology Organization, 17 July 2009)

Annex B. Interviews

Organisation	Location
Standard and Metrology Department	Standard and Metrology Department, Ministry of Science and Technology
Intellectual Property Standard and Metrology Division	Department of Science and Technology of Vientiane Capital
Petroleum Inspection Unit	Friendship Bridge 1, Vientiane Capital
Standard and Metrology Division	Provincial Department of Science and Technology of Khammuane Province
Petroleum Inspection Unit	Friendship Bridge 3, Khammuane Province
Standard and Metrology Division	Provincial Department of Science and Technology of Savanhnakhet Province
Standard and Metrology Division	Provincial Department of Science and Technology of Champasak Province
Petroleum Inspection Unit	Dansavanh International Checkpoint, Savanhnakhet Province
Petroleum Inspection Unit	Vangtao International Checkpoint, Champasak Province
Trader-Petroleum	Savanhnakhet Province
Trader-Petroleum	Champasak Province
Trader-Petroleum	Khammuane Province
Trader-Petroleum	Vientiane Capital

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Annex C. Products and HS Codes

The HS Codes covered by the NTMs (as listed in the Lao Trade Portal) are:

HS Code	Description	
2709001000	- Crude petroleum oils	
2709002000	- Condensates	
2711211000	- In gaseous state: Natural gas: Of a kind used as a motor fuel	
2711219000	- In gaseous state: Natural gas: Other	
2711290000	- In gaseous state: Other	
2710122000	Aviation spirit, not of a kind used as jet fuel	
2710192000	Topped crudes	
2710197100	Automotive diesel fuel	
2710197200	Other diesel fuels	
2710198100	Aviation turbine fuel (jet fuel) having a flash point of 230 C or more	
2710198200	Aviation turbine fuel (jet fuel) having a flash point of less than 230 C	
2710198300	Other kerosene	
2710198900	Other medium oils and preparations	
2710199000	Other	
2710200000	- Petroleum oils and oils obtained from bituminous minerals (other than crude) and preparations not elsewhere	
	specified or included, containing by weight 70 % or more of petroleum oils or of oils obtained from bituminous	
	minerals, these oils being the bas	
2710121300	Of RON 90 and above, but below RON 97, leaded	
2710121400	Of RON 90 and above, but below RON 97, unleaded	
2710121100	Of RON 97 and above, leaded	
2710121200	Of RON 97 and above, unleaded	
2710121500	Other, leaded	
2710121600	Other, unleaded	
2710123000	Tetrapropylene	
2710124000	White spirit	
2710127000	Naphtha, reformates and other preparations of a kind used for blending into motor spirits	
2710128000	Other alpha olefins	
2710129000	Other	
2710197900	Fuel oils	