

# Enhancing Online National Trade Portals/Repositories

UNESCAP-ARTNeT-ITD Online Course on Trade Facilitation for Sustainable Development

## Module 7 – Capability Maturity Model for Highly Effective NTRs

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# Module Objective

To discuss **how the organizational capability** of an NTR could be **improved** such that the NTR can be **more effective** and delivers **higher value and impacts** to the trader & government community,

specifically by applying **a capability maturity model** as a guideline to

- ▶ assessing the **“as-is” organizational capability** of an NTR, and then
- ▶ proposing **“to-be” capability** for a more effective and better sustainable NTR.

# NTR is about establishing and sustaining **an institution.**

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NTR is not just about developing a website!

– but about establishing and sustaining **an institution**  
**(governance structure and process)**

## Governance Structure

- ▶ **High-level Policy Mandate & Leadership**
- ▶ **Inter-agency/Stakeholders Collaboration**
- ▶ **Strong Lead Agency & Management/Operating Team Capability**
- ▶ **Infrastructure & Tools**  
[e.g. Cloud infrastructure, and software]
- ▶ **Budgets**  
[ongoing adequate budget, and other resources]

## Governance Process

- ▶ **Planning**
- ▶ **Consolidating/Publishing**  
[the contents on the web portal]
- ▶ **Operating**  
[ongoing operations including helpdesk, feedback, etc.]
- ▶ **Measuring (Quality Assurance) & Improving**

## 9 Critical Success Components

1. **Effective Contents/Services** (1. accessibility, 2. relevancy/understandability, 3. features/functions/performance, 4. accuracy, 5. timeliness, 6. consistency, 7. completeness)

### A. Effective Contents

2. **Leadership & Stakeholders Collaboration**
3. **Lead Agency & Mgmt/Operating Team Capability**
4. **Infrastructure & Tools** [e.g. ICT/Cloud infrastructure, Software Tools]
5. **Budgets/Other Resources** [ongoing adequate budget, and other resources]

### B. Sustainable Governance Structure

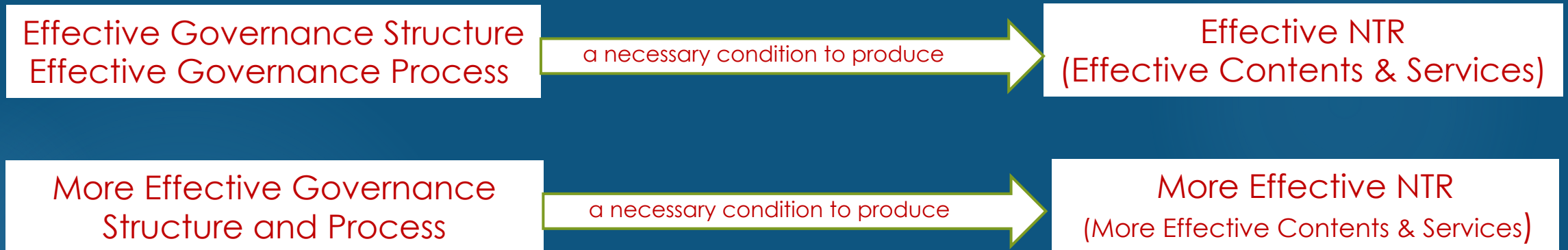
6. **Planning**
7. **Consolidating/Publishing** [the contents on the web portal]
8. **Operating** [ngoing operations including helpdesk, feedback, etc.]
9. **Measuring & Improving**

### C. Continuous Improvement Process (PDCA)

# Effective Institution → Effective Contents/Effective NTRs

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The quality/effectiveness of NTR is highly influenced by the quality/effectiveness of the governance structure and process used to develop and maintain it\*.



**To deliver a Highly Effective NTR,  
a Highly Effective Governance Structure and Process must be established.**

**A Capability Maturity Model as a roadmap  
towards a Highly Effective and Sustainable NTR is proposed.**

\*Ref: SEI's Process Premise

\* Just an example, with approx. assessment from an outsider/user's perspective i.e. if possible we need to assess this from the inside to capture all complete assessments.

- Each maturity level builds on the previous levels by adding new functionality or rigor resulting in increased capability.

## Capability Maturity Model\* for Highly Effective NTRs

\*Ref:  
 - Edwards Demming's PDCA  
 - Toyota's Kaizen  
 - SEI/CMU's CMM  
 etc.

### 5 Areas of Improvement

5. Technology & Process Change Mgmt

4. Quantitative Mgmt on Contents/Process Quality

3. Leadership, Stakeholder Collaboration

2. Governance Process

1. Governance Structure

#### Maturity Level 0

No Portal

×

×

×

×

×

#### Maturity Level 1

Trade Info Portals exists only at Agency Levels

×

×

×

×

✓

#### Maturity Level 2

NTR exists but partially or in different siloes

×

×

×

✓

✓

#### Maturity Level 3

NTP exists with aggregated contents from all or almost all of the relevant regulatory agencies

×

×

✓

✓

✓

#### Maturity Level 4

NTP exists with consolidated contents from all regulatory agencies + Quantitative Management on the Quality of Contents and Process esp. Defect Detection Mechanism

×

✓

✓

✓

✓

NTP exists with consolidated contents from all regulatory agencies with Quantitative Management on the Quality of Contents and Process + Process/Techno Change Mgmt. and Defect Prevention Mechanism

✓

✓

✓

✓

✓

Which Country?

at

Maturity Level 5

Tajikistan\*?  
[tajtrade.tj](http://tajtrade.tj)

closed to?

Thailand\*  
[thailandNTR.com](http://thailandNTR.com)

at

Pakistan\*  
[tdap.gov.pk/customspk.com](http://tdap.gov.pk/customspk.com)

at

Mongolia\*  
[www.customs.gov.mn/en/inspection.gov.mn/mofa.gov.mn/](http://www.customs.gov.mn/en/inspection.gov.mn/mofa.gov.mn/)

at



If the country trade repository is at ML 1 or 2, the next/to-be development goal is ML3.

What are the areas of improvement, or critical success factors “to be” accomplished for **ML3**?

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## Institution/Governance Structure

### ▶ High-level Policy Mandate & Leadership

- ▶ Establishing Legislative or Cabinet Mandate (only a Ministry level is not enough)
- ▶ Aligning the work of “establishment/sustainability of NTR” within NTFC
- ▶ Establishing mandates/policy agreements to **consolidate different partial/siloed NTRs** (if multiple NTRs exist) into a single platform.

### ▶ Inter-agency and Business Stakeholder Collaboration

- ▶ **All government agencies must be mandated** (by legislation, institutionalized executive orders, or national/regional commitments) with “**routine management**”
- ▶ NTFC as the steering comm, and tasking **routine inter-agency working groups** with knowledgeable representatives for aggregating, reviewing, quality assuring (QA), improving contents and suggesting NTR's services improvement.

If the country trade repository is at ML 1 or 2, the next/to-be development goal is ML3.

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What are the areas of improvement, or critical success factors “to be” accomplished for **ML3**? (cont.)

## Institution/Governance Structure (cont.)

### ► Strong Lead Agency

- An official high-level policy designating a lead agency for managing the collaboration, and establishing/operating/maintaining the NTR platform, e.g. candidate agencies (recognizing the difference of each country's context)
  - **Dept. of Export Promotion** – evolves to become -> **Dept. of International Trade** (Marketing Promotion, and Trade Facilitation, e.g offering one-stop services not only for “Import/Export Match Making” but also for import/export procedures and perhaps responsible for “Establishing/Maintaining NTRs”)
  - **Dept. of Trade Negotiation** – has the expertise advantages in trade negotiation policy, international trade rules and laws.
  - **Dept. of Customs** – has the expertise advantages in customs operations and potentially beyond.



If the country trade repository is at ML 1 or 2, the next/to-be development goal is ML3.

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What are the areas of improvement, or critical success factors “to be” accomplished for **ML3**? (cont.)

## Institution/Governance Process

- 
- ▶ **Planning** – scoping/planning tasks esp. on collaboration, to capture/aggregate as-is procedures, forms, rules/regulations etc. from major or all regulatory agencies, e.g. first on strategic export products.
  - ▶ **Consolidating** – working collaboratively to capture the contents from different agencies
  - ▶ **Organizing/Publishing** the contents on the portal – this could be accomplished by technical web staffs of the portal
  - ▶ **Operating** – providing ongoing maintenance by tech web staffs, helpdesk/Q&A/feedback by helpdesk personnel etc.
  - ▶ **Evaluating** – reviewing the quality of the contents and services offered on the portal, also by NTFC and traders community.
  - ▶ **Improving** – suggesting improvement recommendations

All the above processes need 5 features

1. **Commitment to Perform**, e.g. tasks mandated
2. **Abilities to Perform**, e.g. training, resources, budgets
3. **Activities Performed**, e.g. doing it
4. **Measurement & Analysis**, e.g. evaluating the results
5. **Verifying Implementation** e.g. conducting QC (Quality Check)

If the country trade repository is at ML 3, the next/to-be development goal is ML4.

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What are the areas of improvement, or critical success factors “to be” accomplished for the high maturity level, **ML4**?

**Building on the top of ML3 (gov structure & process) by adding the following new functionality or rigor resulting in increased capability.**

- ▶ **Better Quantitative Management** on the quality of contents/services, and process
- ▶ **Defect Detection Mechanism** automatically or semi-automatically, those related to, e.g.

- ▶ Accuracy of the contents
- ▶ Timeliness/Up-to-Date of the contents
- ▶ Completeness of the contents
- ▶ Content Inconsistency Detection
- ▶ Relevancy of the Contents
- ▶ NTR's digital and human Services and Performances, etc.

**Examples:**

- An inter-agency working team **meeting regularly** to consolidate/capture “as-is” end-to-end procedures, rules/regulations, ...
- Another team as **expert peer review & feedback routinely**
- Quality Auditing and **Certifying the Contents** by Certified Auditors
- **Quantitatively Measuring** the quality of contents as best as possible
- **Measuring the content coverage** of the portal.
- **Receiving defect feedbacks/alerts** from the community

If the country trade repository is at ML 4, the next/to-be development goal is ML5.

What are the areas of improvement, or critical success factors “to be” accomplished for the high maturity level, **ML5**? (cont.)

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**Building on the top of ML4 (gov structure & process, Quantitative Mgmt., Defect Detection) by adding the following new functionality or rigor resulting in increased capability.**

- ▶ **Technology Change & Process Change Management**, e.g. systematically measuring and improving “impacts” of NTR’s contents & services, and beyond
- ▶ **Defect Prevention** automatically or semi-automatically, those related to, e.g.

- ▶ Accuracy of the contents
- ▶ Timeliness/Up-to-Date of the contents
- ▶ Completeness of the contents
- ▶ Content Inconsistency Prevention
- ▶ Relevancy of the Contents
- ▶ NTR’s digital and human Services and Performances, etc.

**Examples:**

- Accuracy/Timeliness/Completeness of the contents are intrinsically or built within the consolidation/publication process automatically, e.g. the contents updated at the source of contents (each regulatory agency) will be updated to the NTR automatically, and also verified back and forth.
- Improving working process, improving technology of the portal to prevent defects or penalties to the traders, and create more impacts to the community (both governments & business)

# Systematic Continuous Improvement for NTR and beyond!

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To increase/create more impacts of the NTR

- ▶ Quantitatively measuring the number of users, and the number of the same users who come back/revisit the portal e.g. using cookies, or memberships
- ▶ Personalizing the contents to suit different viewpoints/needs of different users, e.g. contents for importers, exporters, customs brokers, freight forwarders, SMEs, Large Enterprises are different.

# Systematic Continuous Improvement for NTR and beyond!

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To increase/create more impacts of the NTR (**BPA/BPI ↔ NTR**)

- ▶ BPA as-is results (capturing esp. the end-to-end process from the business perspective) → as the input for publishing on → the NTR.
- ▶ As it is transparent/visible on the NTR → it should be used for identifying pain points/bottlenecks, and generating improvement recommendations.
- ▶ These improvement recommendations are to be reviewed by the institutionalized governance structure & PDCA process.
- ▶ Those recommendations escalated to the right authority, e.g. NTFC or Cabinet, to get endorsed, mandated and funded back to each individual agency for actual implementation.



# In the next module,

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We're going to discuss more about other possible evolutions or continuous improvement directions of the portals for even higher impact creations.



Thank you so much  
for your continuing interest.

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