

# Technical Assistance 8585 REG: Aligning Customs Trade Facilitation Measures with Best Practices in Central Asia Regional Economic Cooperation

Review for Output 3: Framework for a CAREC Customs Information Exchange

**Customs Cooperation Committee**  
Singapore  
September 21, 2016

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# INTRODUCTION




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October 2013

Refined TTFS 2020 and Implementation Action Plan was approved by 12<sup>th</sup> CAREC Ministerial Conference

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- **Context:**
  - The Technical Assistance will promote a concerted approach to customs reforms in CAREC countries by applying international best practices.
- **Expected Outcome:**
  - The project will simplify and harmonize clearance procedures at border crossing points in CAREC countries based on best practices.
- **Expected Outputs:**
  1. Action plans to align customs regulations with the Revised Kyoto Convention developed
  2. Proposals for the modernization of risk management systems developed
  - 3. Framework for a CAREC customs information exchange mechanisms developed**
    - Deliverables of Component 3 of TA 8585:
      - 3a. Development of Assessment Framework**
      - 3b. Conducting the Assessment Framework**
      - 3c. Proposal of two pilot projects**

*[Red Text]: Areas of focus for this presentation.*

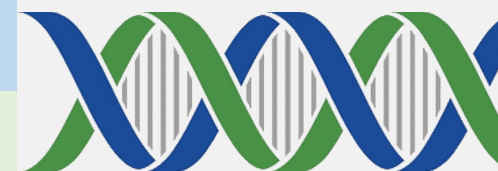
# METHODOLOGY

## What is an IE Assessment Framework?

The IE Assessment Framework is defined by the capabilities of the customs agencies and the mechanisms (i.e. type and complexity of information exchanged).

IE Mechanisms	<b>Pillar 1: Harmonization &amp; Standardization</b> The ability for trade data to be processed, transmitted and re-processed without difficulty between various trading partners <sup>1</sup> and their different technologies
	<b>Pillar 2: Computerization and Efficiency</b> The degree of automation, integration and process effectiveness
IE Capabilities	<b>Stream 1: IE Readiness</b> The degree to which Customs is able and willing to participate in information exchange
	<b>Stream 2: IE Maturity</b> The degree to which Customs can respond (and is positioned to react) appropriately during information exchange.

## IE ASSESSMENT FRAMEWORK



Rather than thinking of Streams and Pillars as separate components, visualize a continuous intertwining of Streams and Pillars to develop a single strand of IE 'DNA'.



**IE Capabilities and IE Mechanisms are 'two sides of the same coin'.**

<sup>1</sup> - Trading partners include relevant stakeholders such as the customs agencies, appropriate inter-government agencies, Authorized Economic Operators (AEO), etc.

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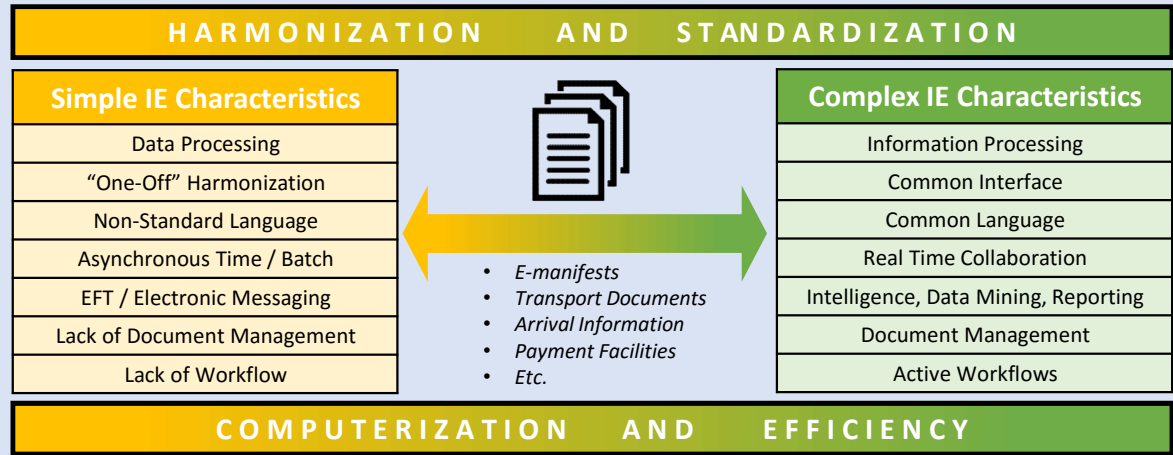
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IE Mechanisms

IE Capabilities



KEY AREAS FOR IE READINESS

- 1 Sponsorship
- 2 Existing Agreement in Place
- 3 Value-Add Defined
- 4 Business Process
- 5 Information Technology
- 6 Management
- 7 Intelligence & Information Sharing Culture
- 8 Partnerships
- 9 Legislation & Policy
- 10 Security, Privacy and Confidentiality

KEY AREAS FOR IE MATURITY

- 1 Leadership
- 2 Track Record
- 3 Linkages
- 4 Value Analysis & Benchmarking
- 5 Customs Risk Management
- 6 Process & Methodology
- 7 Ability to Monitor & Evaluate
- 8 Governance & Compliance
- 9 Project Management
- 10 Program Management



Every customs agency in CAREC has been automated and modernized, and therefore, **ALL** countries assessed have the ability to engage in IE in its simplest form.



- The nature and scope of the pilot was selected based on **immediate and operational benefits**.
  - 6 out of 7 countries indicated that automated pre-arrival information would be a big step towards efficiency
  - 5 out of 7 countries suggested automating and advancing transport documents, and 4 out of 7 countries suggested automating and digitizing cargo manifests would minimize fraud
- By applying **minimum threshold scores** to the results from IE Capabilities, candidates for either the SIE or CIE will naturally emerge (see section *Results & Pilots* for more details).
- Given the demand, the coverage of the **two (2) pilot projects** would be pre-arrival, e-manifest and transport information.
  - **Simple Information Exchange (SIE)** and **Complex Information Exchange (CIE)**
  - Distinction based on the complexity level of data exchanged and the process automation it enables
  - The planning, design, launch, governance, monitoring and evaluation of the pilot projects is outside the scope of this study



# RECOMMENDATIONS

## Recommendation 1: Think Big. Start Small. Scale Fast.

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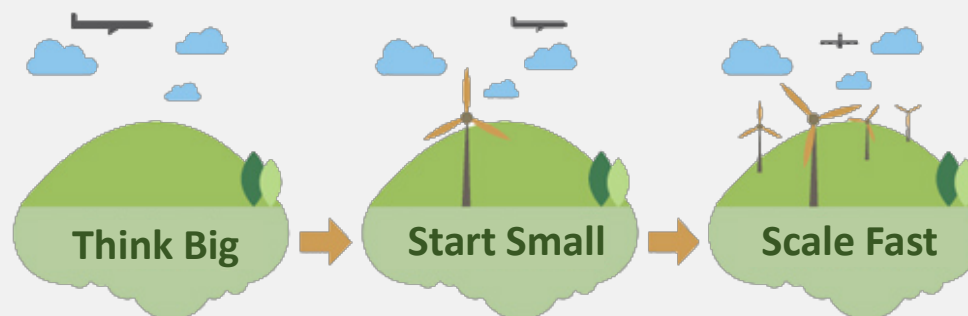
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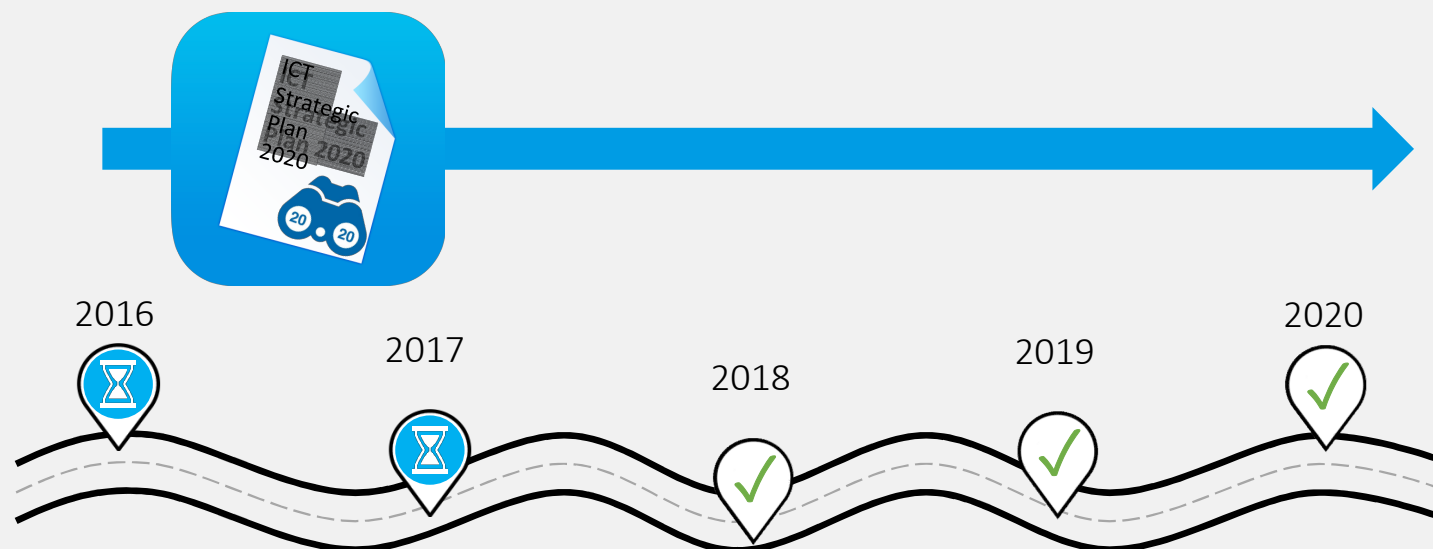
- All countries are capable of information exchange
- All countries have the same requirements to simplify and harmonize clearance procedures
- Countries currently in bilateral or regional dialogues should consider incorporating IE automation
- Start small, use simple file exchanges and scale up accordingly



## Recommendation 2: Customs ICT Strategic Plan

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- Key Finding: Many countries lack an ICT Plan, resulting in a lack of: vision, focus, opportunities for innovation and clear outcomes
- Projects, both donor and internally funded, are most often under resourced or without a clear path for sustainment at post implementation
- It is recommended that customs agencies develop a 3-year ICT strategic plan to lay the foundations for future provisioning customs information systems services



## Recommendation 3: Focused Capacity Building

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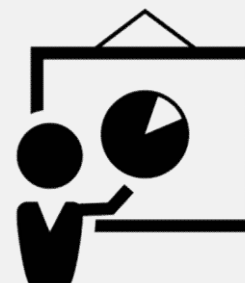
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- Improving the current CIS would require strengthening of upstream capabilities and non-technical skills to minimize risks for failed implementations, missed requirements, business process inefficiencies and process misalignment.

- IE Assessment shows low maturity scores in non-technical key areas such as program management (1.9), linkages (2.2), ability to monitor and evaluate (2.3), process and methodology (2.5), project management (2.6), business process (2.7), and value analysis and benchmarking (2.8).



- Ongoing professional courses and knowledge products should be offered through the CAREC Institute to build capacity and knowledge of customs agencies areas such as these.

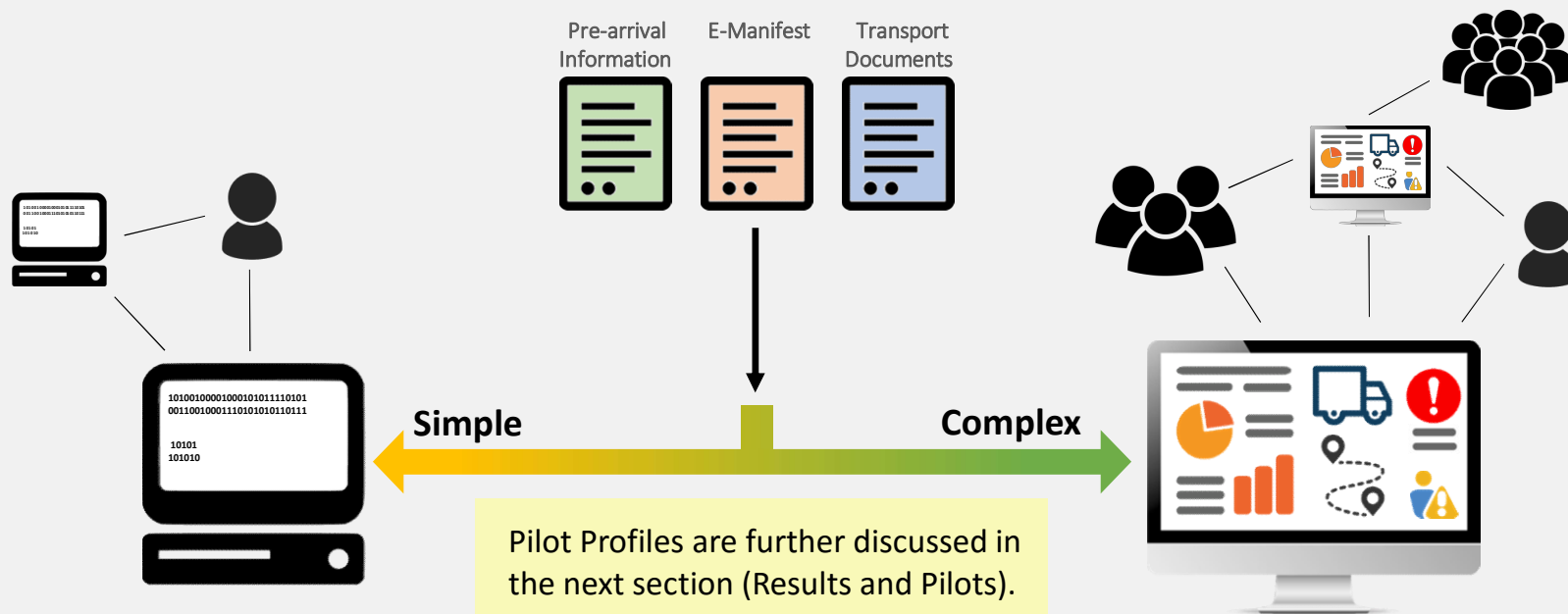
Key Area	Average IE Score <sup>1</sup>
Legislation & Policy	3.9
Governance & Compliance	3.9
Information Technology	3.9
Track Record	3.5
Sponsorship	3.5
Existing Agreement in Place	3.3
Leadership	3.4
Management	3.4
Partnerships	3.4
Intelligence & Information Sharing Culture	3.0
Security, Privacy and Confidentiality	2.9
Value-Add Defined	2.8
Customs Risk Management	2.8
Value Analysis & Benchmarking	2.8
Business Process	2.7
Project Management	2.6
Process & Methodology	2.5
Ability to Monitor & Evaluate	2.3
Linkages	2.2
Program Management	1.9

Red-colored texts indicate areas of improvement

<sup>1</sup> - Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, People's Republic of China, Tajikistan, and Uzbekistan

## Recommendation 4: IE Pilot Projects

- Based on demand and interests, two types of pilot will focus on simplifying and harmonizing clearance procedures through pre-arrival information, e-manifests, and transport documents. One will focus on a simple IE solution. The other will focus on a more complex data-driven solution that is integrated to risk management and operational workflows
- Lessons learned from the pilots are encouraged to drive tactical and operational improvements to the CIS
- Using a bottom-up approach, the pilots are also planned to drive the CAREC Regional IE Strategy. Both the pilots and developing the CAREC Regional IE Strategy go hand in hand
- As a long running demonstration project, the pilots will also be a platform for high level dialogues amongst participants to discuss policies, reforms and technical conditions



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## Recommendation 5: CAREC Regional IE Strategy

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- To support the CAREC 2020 Strategic Framework, it is recommended that a CAREC Regional IE Strategy be developed and instituted to:
  - I. Align country specific customs IE strategy with the regional IE strategy;
  - II. Reduce duplication of efforts and resources of individual countries;
  - III. Strengthen each country's readiness and maturity in the IE Assessment Framework to increase capabilities;
  - IV. Share and leverage architectures, solutions and "lessons learned" in trade facilitation; and
  - V. Provide a path for developing a common vision, requirements and solutions such as a regional IE platform among others.



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# RESULTS & PILOTS





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### Simple IE Pilot Level



- Scope: Pre-arrival, e-manifest, transit documents
- Point to point synchronous file transfer
- Manual review and processing before goods arrive at its destination
- Limited to no process automation
- Basic user interface
- Limited reporting

### Complex IE Pilot Level



- Scope: Complex pre-arrival, e-manifest, transit documents
- Synchronous file transfer in real time through block chained distributed database servers with security features
- Generating an automated event or a set of activities
- Integration of customs risk management system, invoking process automation
- Dynamic user interface
- Data exchanged is aggregated for reporting and business analytics

## Summary of Readiness and Maturity Scores for All Key Areas






KEY AREAS	AZERBAIJAN	KAZAKHSTAN	KYRGYZ	MONGOLIA	CHINA	TAJIKISTAN	UZBEKISTAN
<b>READINESS</b>							
Sponsorship	4.1	3.7	3.1	2.5	N/A	3.2	4.3
Existing Agreement in Place	3.9	3.0	3.0	3.3	2.6	3.3	3.7
Value-Add Defined	2.9	3.3	2.7	2.7	N/A	2.4	2.9
Business Process	3.5	2.9	3.3	2.1	N/A	1.5	3.1
Information Technology	4.3	3.7	4.2	3.7	4.0	2.6	4.5
Management	3.9	3.8	3.9	2.3	N/A	2.4	3.9
Intelligence & Information Sharing Culture	4.2	2.7	3.3	2.2	N/A	2.4	3.1
Partnerships	4.1	3.5	3.3	3.2	N/A	3.3	3.1
Legislation & Policy	4.4	3.7	3.7	3.9	N/A	3.8	3.9
Security, Privacy and Confidentiality	3.9	2.9	1.9	2.9	N/A	2.1	3.6
<b>READINESS AVERAGE</b>	<b>3.9</b>	<b>3.3</b>	<b>3.2</b>	<b>2.9</b>	<b>3.3*</b>	<b>2.7</b>	<b>3.6</b>
<b>MATURITY</b>							
Leadership	4.4	3.5	3.3	2.7	N/A	2.8	3.5
Track Record	4.3	3.1	3.7	3.1	3.3	3.0	4.2
Linkages	2.8	2.3	2.3	1.3	N/A	1.8	2.8
Value Analysis & Benchmarking	3.0	2.5	2.1	2.4	3.9	2.2	3.3
Customs Risk Management	4.2	3.1	2.2	1.9	3.3	2.6	2.3
Process & Methodology	3.9	3.0	2.3	1.6	3.4	1.5	1.9
Ability to Monitor & Evaluate	2.3	2.9	2.8	1.9	N/A	1.8	2.1
Governance & Compliance	4.1	3.9	3.7	4.0	N/A	3.8	4.1
Project Management	4.2	2.1	3.0	1.7	3.8	1.3	2.4
Program Management	2.6	1.8	2.2	1.5	N/A	1.2	2.1
<b>MATURITY AVERAGE</b>	<b>3.6</b>	<b>2.8</b>	<b>2.8</b>	<b>2.2</b>	<b>3.5*</b>	<b>2.2</b>	<b>2.9</b>






### LEGEND

Key Areas at Risk	N/A	Not Applicable
Key Areas at the Simple Pilot Level	*	Values from an incomplete / partial assessment
Key Areas at the Complex Pilot Level		



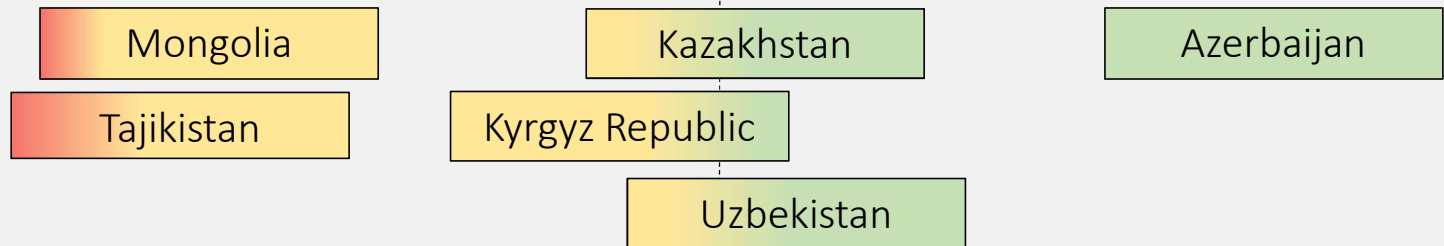
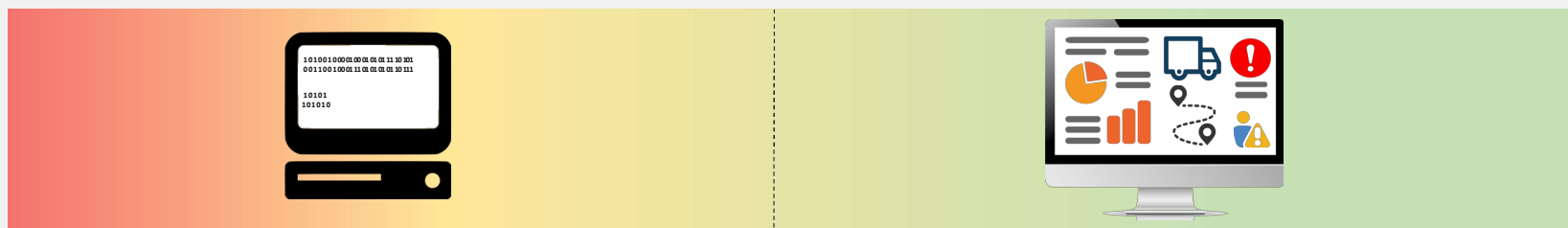
Meeting the minimum thresholds for the pilots is a better indicator of capability than absolute scores.

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### Simple IE Pilot

### Complex IE Pilot

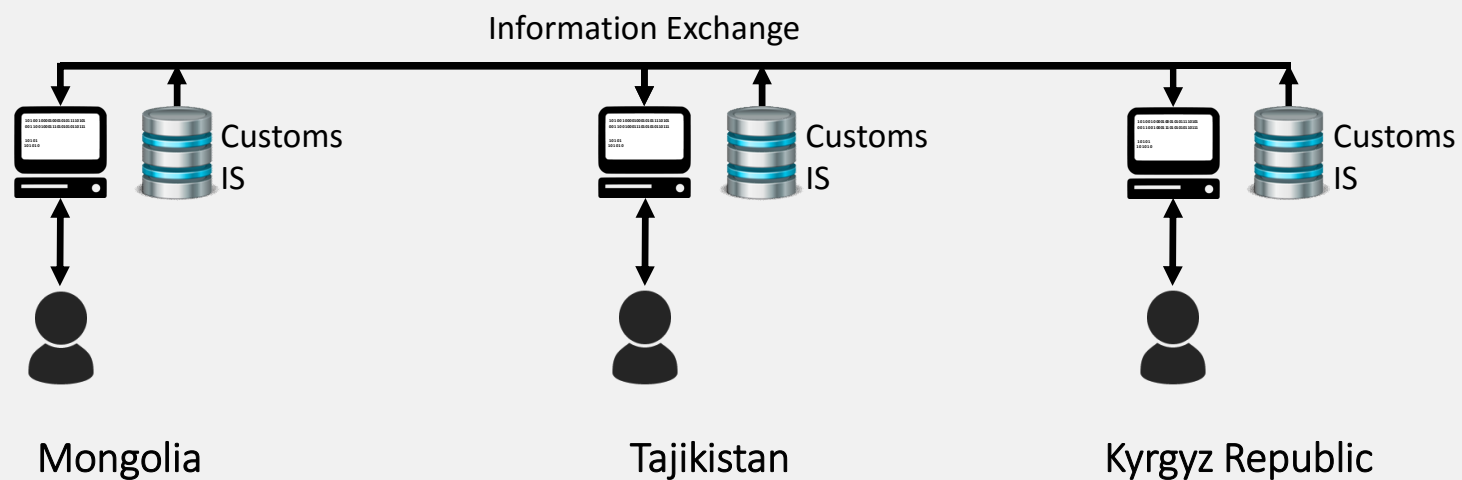


#### Candidates for Simple IE Pilot

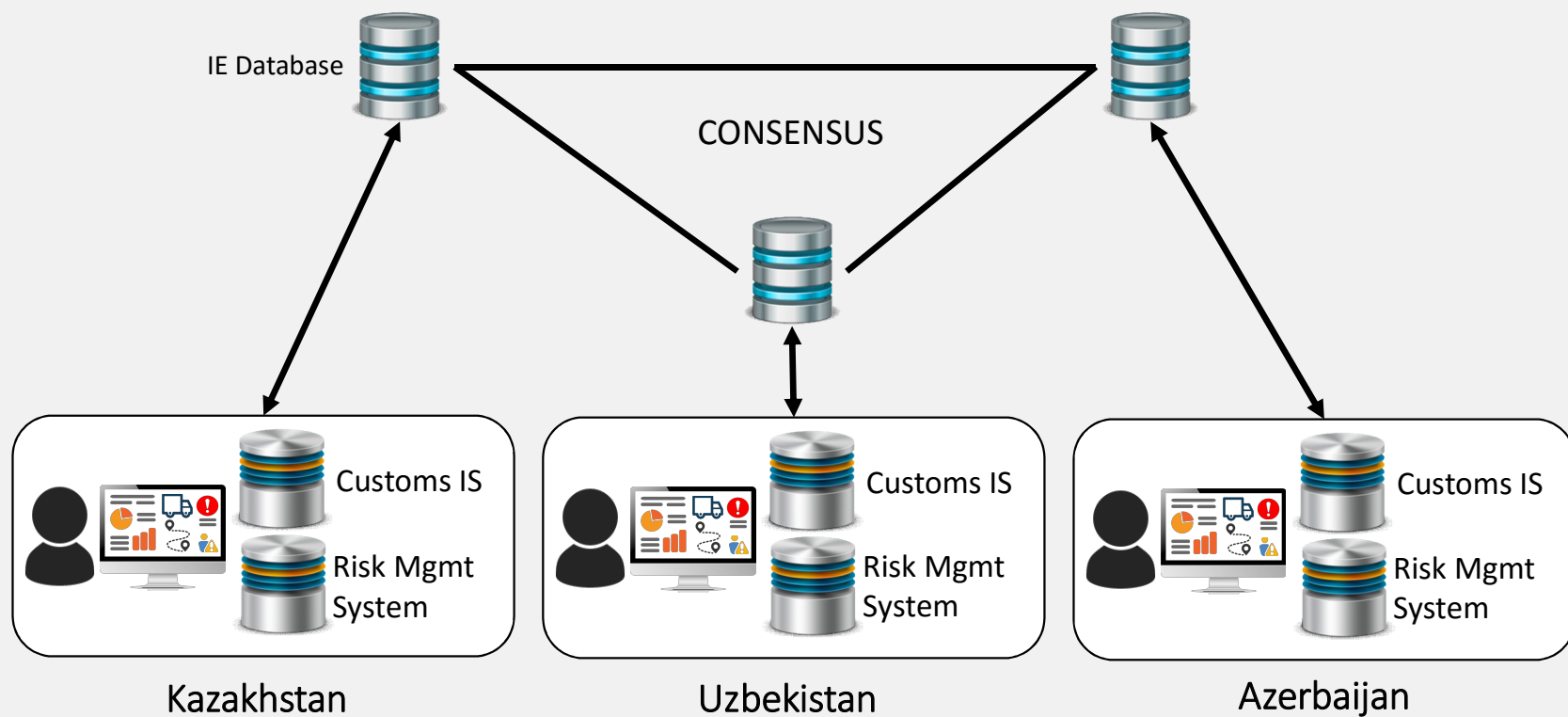
- Mongolia, Tajikistan, Kyrgyz Republic
  - For Mongolia and Tajikistan, additional safeguards will be required by addressing the risk attributes

#### Candidates for Complex IE Pilot


- Kazakhstan, Uzbekistan, Azerbaijan
  - For Kazakhstan and Uzbekistan, additional safeguards will be required by addressing the lack of maturity in a few key areas



- The above depicts a simple one-way file exchange in real time from the customs information systems.
- No integration of information exchange to customs information system and risk management system



- The above depicts a complex two-way information exchange in real time possibly using the latest distributed database technology
- Full integration of information exchange to customs information system and risk management system

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- (i) Determine the degree of integration and the maximum extent of data sharing acceptable by CAREC member countries through collaboration, dialogues and technology.
- (ii) Assess the feasibility of integration and technology for Complex Information Exchange.
- (iii) Measure and compare modest efficiency gains (through SIE pilot) versus radical efficiency gains (through CIE pilot).
- (iv) Establish the blueprint for sustained support for information exchange.
- (v) Demonstrate smart learning through lessons learned and improvement in participants' capabilities.
- (vi) Complement other regional cooperation and integration (RCI) initiatives.
- (vii) Replicate and expand the pilot to other CAREC member countries.

# OUTCOMES



## Expected Risks and Mitigation

Type of Risks	Risk Rating	Comments and Notes	Risk Mitigation
			Strategies Embedded Within Recommendations
<b>General Lack of Trust</b>	<u>High</u>	<ul style="list-style-type: none"> <li>One of the most important factor in reaching a regional cooperation solution is trust</li> </ul>	<ul style="list-style-type: none"> <li>Pilots are platforms for partnership that encourages dialogue and workshops between countries</li> <li>Pilots can pave the way for a longer-term IE strategy</li> </ul>
<b>Weak Implementation Capacity and Knowledge Constraints</b>	<u>High</u>	<ul style="list-style-type: none"> <li>Lack of knowledge in non-technical key areas</li> <li>Technical challenges of developing a trust model, ensuring information security</li> </ul>	<ul style="list-style-type: none"> <li>Pilots should coordinate with the CAREC Institute in building these capabilities</li> <li>The technology solution should be designed to allow multiple country residency that is tamper-proof</li> </ul>
<b>Regional Trading Blocs and Multilateral Treaties</b>	<u>High</u>	<ul style="list-style-type: none"> <li>Several countries have been preparing their CIS after acceding to other regional trading blocs (Eurasian Customs Union, GUAM)</li> <li>Nearly all countries have some type of IE initiative in the form of an agreement, a pilot project or is currently operationally functional</li> <li>TIR is used by most CAREC countries. However, the TIR model has limits, particularly in scaling out to smaller operators</li> </ul>	<p>Pilots should be designed to:</p> <ul style="list-style-type: none"> <li>Leverage work completed by CAREC countries on transnational information exchange efforts;</li> <li>Complement existing information exchange systems without additional complexities and user burden; and</li> <li>Most importantly, strengthen a business model that is highly differentiated with clear benefits out good outcomes.</li> </ul>
<b>Localization of Information</b>	<u>High</u>	<ul style="list-style-type: none"> <li>Multi-lingual support continues to be problematic</li> </ul>	<ul style="list-style-type: none"> <li>Pilots should be designed to disambiguate languages when exchanging information and address the localization of information</li> </ul>
<b>Difficult Institutional Arrangements and Understanding</b>	<u>High</u>	<ul style="list-style-type: none"> <li>Commitments from customs agencies may be difficult to achieve given time and limited resources.</li> <li>A lack of a common vision and a coherent strategy</li> </ul>	<ul style="list-style-type: none"> <li>Start small and build effective processes, capabilities and common understanding over duration of the project</li> </ul>
<b>Technology And Integration Challenges for CIE</b>	<u>High</u>	<ul style="list-style-type: none"> <li>Solutions that align well to the inimitable needs of internationalization and trade development such as blockchain technology may not be yet mature</li> </ul>	<ul style="list-style-type: none"> <li>Addressed in the pilot through research, technology proof of concept, small scale implementation and testing</li> </ul>
<b>Donor Efforts</b>	<u>Medium</u>	<ul style="list-style-type: none"> <li>Though there are customs and IE related projects funded by various international development agencies, there is a lack of strategy to maximize funding opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize opportunities and coordinate complementary funding with other institutional donors</li> </ul>
<b>Compliance with WCO Standards</b>	<u>Low</u>	<ul style="list-style-type: none"> <li>WCO has a common reference model, but half of the products in the market do not fully comply with the model</li> </ul>	<ul style="list-style-type: none"> <li>Pilots should ensure the basic data elements are captured and used appropriately based on WCO standards</li> </ul>

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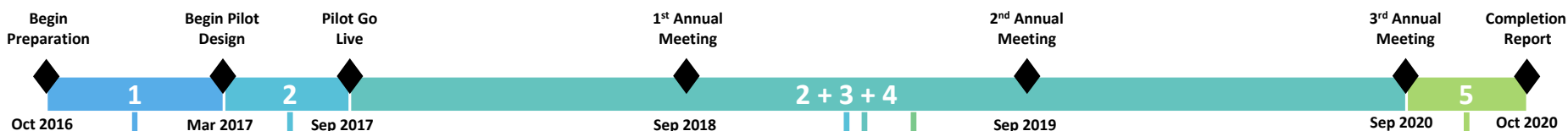
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# Key Action Plan – High Level Summary<sup>1</sup>

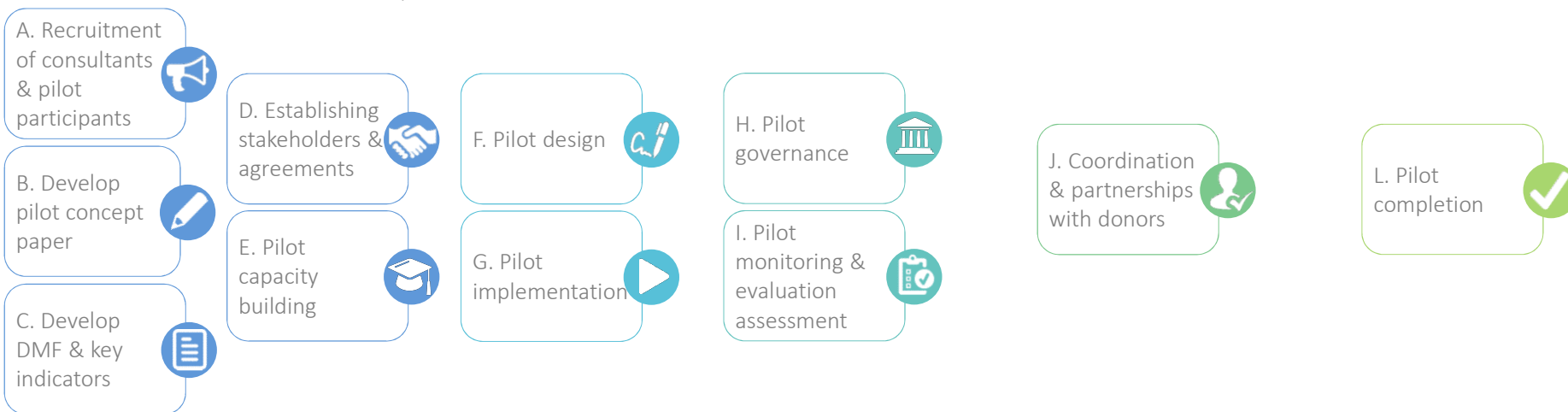
## Key Milestones



## Phases

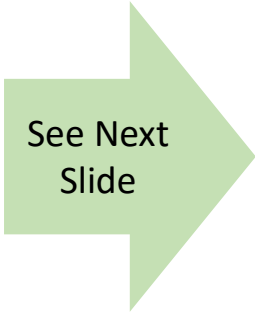
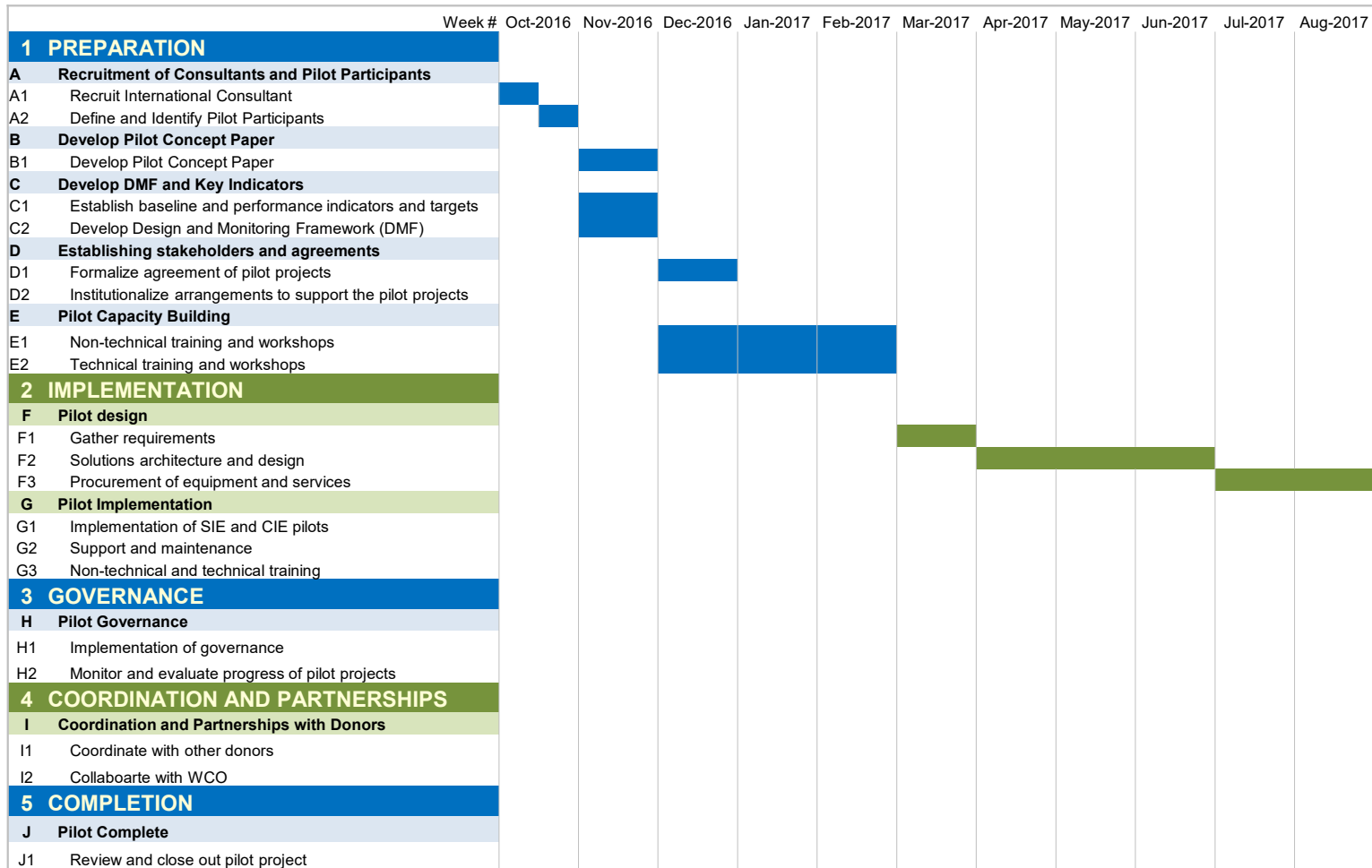


## Major Actions





Key Action Plan – Gantt Chart (1 of 2)



# Key Action Plan – Gantt Chart (2 of 2)


Week #	Sep-2017	Oct-2017	Nov-2017	Dec-2017	Jan-2018	Feb-2018	Mar-2018	Apr-2018	May-2018	Jun-2018	Jul-2018	Aug-2018	Sep-2018	//	Jul-2020	Aug-2020	Sep-2020	Oct-2020	
<b>1 PREPARATION</b>																			
<b>A Recruitment of Consultants and Pilot Participants</b>																			
A1	Recruit International Consultant																		
A2	Define and Identify Pilot Participants																		
<b>B Develop Pilot Concept Paper</b>																			
B1	Develop Pilot Concept Paper																		
<b>C Develop DMF and Key Indicators</b>																			
C1	Establish baseline and performance indicators and targets																		
C2	Develop Design and Monitoring Framework (DMF)																		
<b>D Establishing stakeholders and agreements</b>																			
D1	Formalize agreement of pilot projects																		
D2	Institutionalize arrangements to support the pilot projects																		
<b>E Pilot Capacity Building</b>																			
E1	Non-technical training and workshops																		
E2	Technical training and workshops																		
<b>2 IMPLEMENTATION</b>																			
<b>F Pilot design</b>																			
F1	Gather requirements																		
F2	Solutions architecture and design																		
F3	Procurement of equipment and services																		
<b>G Pilot Implementation</b>																			
G1	Implementation of SIE and CIE pilots																		
G2	Support and maintenance																		
G3	Non-technical and technical training																		
<b>3 GOVERNANCE</b>																			
<b>H Pilot Governance</b>																			
H1	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Web Meet	Face to Face	Web Meet	Web Meet	Face to Face		
H2	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
<b>4 COORDINATION AND PARTNERSHIPS</b>																			
<b>I Coordination and Partnerships with Donors</b>																			
I1	Coordinate with other donors																		
I2	Collaboarte with WCO																		
<b>5 COMPLETION</b>																			
<b>J Pilot Complete</b>																			
J1	Review and close out pilot project																		
																			Submit Project Completion Report

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## NEXT STEPS

### NEXT STEPS FOR CUSTOMS AGENCIES

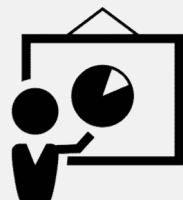


Promote the use of IE during trade facilitation dialogues (Recommendation 1)



Develop a Customs 3-Year ICT Strategy (Recommendation 2)

### NEXT STEPS FOR CAREC AND ADB IN 2017



Led by the CAREC Institute, promote focused capacity building (Recommendation 3)



Plan, design and launch the two pilot projects (Recommendation 4)



Develop and evolve an actionable CAREC Regional IE Strategy (Recommendation 5)

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Thank You