eGovernment Domain Discussion

Vice Chair
Mr. Tahseen Ahmad Khan

Domain Coordinator
Mr. Kaushik Srinivasan

Project Leader – Blockchain/IoT
Ms. Virginia Cram Martos

Date
Oct 16, 2018

Room
Huagang Room
# eGovernment Domain Discussion

## Agenda for the day

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<th>Time</th>
<th>Topic</th>
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<td>9.00</td>
<td>Opening Remarks</td>
<td>Mr. Tahseen Ahmad Khan, Vice Chair, UN/CEFACT</td>
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<td>9.15</td>
<td>International Convention – Mutual Recognition – Next Steps</td>
<td>Mr. Kaushik Srinivasan, Domain Coordinator</td>
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<td>IoT Whitepaper Project</td>
<td>Ms. Virginia Cram Martos, Project Leader, IoT Whitepaper Project</td>
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<td>10.30</td>
<td>Coffee Break</td>
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<td>11.00</td>
<td>Digital ID for Trade Electronic Notary</td>
<td>Working Group</td>
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<td>Data Retention</td>
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<td>Use of Artificial Intelligence in Trade Facilitation</td>
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<td>12.30</td>
<td>Lunch Break</td>
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**eGovernment Domain Discussion**

**• Agenda for the day**

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<td>14.00</td>
<td>Discussion on privacy laws and its implication on Foreign Trade</td>
<td>Working Group</td>
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<td>Supply Chain with special emphasis on IoT, Blockchain</td>
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<td>15.30</td>
<td>Closing Remarks</td>
<td>Mr. Tahseen Ahmad Khan, Vice Chair, UN/CEFACT</td>
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eGovernment Domain Discussion

- International Convention - Trusted Trans-boundary electronic interaction/Mutual Recognition mechanism
  - Cross-border trade requires acceptance of electronic documents by multiple jurisdictions
  - Currently, efforts around mutual recognition are regional or domain specific
  - This project was taken up to develop a framework convention which is intergovernmental
- Whitepaper approved by Bureau
- Position Paper prepared and finalized
  - Link to position paper
  - Highlights benefits of cross border trade
  - Regional efforts around mutual recognition and need for framework convention
  - Assessment of Impact
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• International Convention - Trusted Trans-boundary electronic interaction/Mutual Recognition mechanism
  • Suggested Next Steps
    • Understand existing instruments including UNCITRAL Model Laws and any bi-lateral, multi-lateral agreements in facilitating trusted trans-boundary electronic interaction
    • Speak to relevant stakeholders who were part of teams responsible for creation and/or implementation of these instruments to understand their effectiveness
    • Prepare a draft proposal with the findings to be presented to the Bureau
    • Hold discussions with country missions with these findings to ascertain their support for a framework convention
    • Prepare a final proposal with inputs from the above points to be presented to the Bureau and UN/CEFACT plenary
  • To discuss
    • How to arrange for resources for carrying on the above activities
    • Project Team formation
    • Project proposal for the considerations of the Bureau
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• Whitepaper for IoT
  • Following IoT Conferences held as part of eGov work programme
    • Apr 24 conference at Geneva to highlight the positive impact IoT can have on trade facilitation.
    • Oct 15 conference at Hangzhou to highlight use cases and implementation examples
  • After the Geneva conference, a proposal for whitepaper project on IoT was prepared. This proposal was approved by the Bureau recently
    • [Link to proposal document](#)
  • Virginia Cram Martos will be the project leader and will commence work post completion of the Blockchain project
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• Whitepaper for IoT
  • Based on inputs from the conferences and discussions, the project scope will include
    • How IoT technology could be used to facilitate trade and related processes
    • How existing UN/CEFACT deliverables could be used by IoT applications
    • Possible changes to UN/CEFACT deliverables, or new deliverables, that could be considered in order to support IoT trade facilitation related applications
    • Key issues to consider while collecting, analyzing and distributing IoT data
  • The focus areas will include
    • Data Modelling, Process Standardization
    • Interoperability
    • Cyber Security Issues
    • Privacy
    • Legal aspects
    • Analytics/Al Integration, Blockchain Integration
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• Digital ID for Trade
  • Digital ID systems which allow an entity to prove their identity online are opening new possibilities for cross-border trade by eliminating trade barriers and paperwork
  • Many forms of ID exist today which are largely physical and do not provide level of trust required for online trade.
  • Key challenges include
    • Inability to establish level of identity vetting
    • Susceptibility of the ID to forgery
    • Inadequate information that allows one to uniquely establish the individual or business
  • Digital ID schemes that are well implemented
    • Allow users to establish their identity as part of an online transaction
    • Enable electronic Notaries or Trusted Authorities to verify this identity
    • Provide confidence to relying parties that could include both consumers and businesses
    • Ensure safe access and transfer of online information
    • Facilitate compliance with required regulatory regimes
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• Digital ID for Trade
  • Some examples of Digital ID schemes include
    • AADHAAR (India’s Digital ID)
    • E-Residency programme offered by Estonia
    • Australia’s Digital Id program
    • GLEIF for KYC
    • Blockchain based Identity Systems
  • The e-Residency programme is interesting as it allows entities to
    • Establish an EU business online which can be administered independent of location
    • Digitally sign, authenticate and encrypt documents/contracts
    • Open an Estonian Bank Account and conduct e-Banking
    • Access international payment service providers
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- Digital ID for Trade
  - AADHAAR Project

  - The AADHAAR project is a digital ID that was given to every resident of India (1.2bn people) over the last 6 years
  - At the time of enrollment, users' fingerprints, retina, and mobile numbers were captured
  - A centralized authentication mechanism was created through which users could perform KYC, Signing for the purpose of opening Bank Accounts, availing State Welfare, getting Telecom connections in a matter of minutes in a completely paperless manner
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- Digital ID for Trade
  - AADHAAR eSign – electronically signing documents with a digital ID from anytime, anywhere

- AADHAAR eSign Benefits
  - Legally valid as per Information Technology Act in India with full identity traceability and audit trail
  - Completely paperless workflows for eGovernance (Birth Certificates, Welfare), Banking, Telecom and other use cases (Account Opening, Employee Onboarding etc)
  - Costs were brought down from USD 2 to USD 5c
  - Time taken for workflow completion brought down to minutes as against several days in traditional paper based workflows
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• Digital ID for Trade
  • While Digital ID systems hold a lot of promise, key aspects need to be studied
    • Standardization of ID Verification procedures, methodologies, information
    • Authentication, Authorization, Validation mechanisms
    • Cross border regulatory compliance
    • Mutual recognition issues
  • Working Group to debate this subject and discuss next steps
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• Data Retention
  • According to IDC, we will create 1800 new exabytes of data this year
  • Organizations are generally required to implement proper information management tools and systems which can store, manage, secure, classify and retrieve information when needed for business or legal purposes
• Some of the key issues include
  • Access
    • Ability to find records quickly based on appropriate roles and entitlements
  • Tools and associated Cost
    • With rapid growth in volume of data, storage systems have undergone massive change. Tools required to access data stored in older storage systems may no longer be supported
  • Risks and Compliance
    • Ensuring compliance in record keeping and how to decide what to keep and what to destroy?
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- Data Retention
  - Some of the key issues include
    - Productivity
      - Users spend an enormous amount of time in retrieving necessary data be it on emails or in physical documents
      - This results in huge wasted time for employees
    - Cross border trade results in huge volume of data generated most of which today is physical in nature and is based on local laws
    - Data Retention standards can aid in the preservation of relevant data and in addressing some of the above challenges that organizations are faced with
  - Working group to debate this subject and discuss next steps
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• Artificial Intelligence for Trade Facilitation
  • Cross-border trade results in huge volume of structured and unstructured data as part of the buy-ship-pay process
  • Manual processes and analysis of data result in huge turn around times. Key areas include
    • Trade Negotiations
    • Trade Operations (customs, supply chain)
    • Trade transactions (letters of credit, trade finance)
  • Data driven decision making using Artificial Intelligence and Machine Learning can significantly speed up trade processes with reduced errors
  • These could include
    • Statistical and Predictive Models
      • For forecasting demand, fraud detection etc
    • Natural Language Processing
      • Mining text data (invoices, payments etc)
    • Computer Vision
      • Running analytics on images, videos
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- Artificial Intelligence for Trade Facilitation
  - When combined with other systems such as IoT and Blockchain, Artificial Intelligence systems can be powerful in facilitating cross-border trade
  - Working group to debate this topic and discuss next steps
Global Privacy Laws and their implication on Foreign Trade Supply Chain

- GDPR
  - The General Data Protection Regulation or GDPR is a regulation in EU Law on data protection and privacy for all individuals within the EU or EEA.
  - GDPR aims to give control to individuals over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU.
  - GDPR is becoming a benchmark for many countries to implement data protection codes for ensuring privacy of individuals.
- Some of the other countries that have strong privacy laws include:
  - US – which has several sector specific and state specific laws
  - Australia – made up of mix of Federal and State specific laws. Federal Privacy Act 1988 and Australian Privacy Principles apply to private sector entities above turnover thresholds
  - China – PRC Cyber Security Law and General Data Protection Law
  - India – Draft India Data Protection Code
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- Global Privacy Laws and their implication on Foreign Trade Supply Chain
  - Given the wide applicability of privacy laws, it is important to note that organizations that use a system that captures personal data may be subject to compliances to protect personal data.
  - The scope of these systems could include
    - Blockchain systems
    - IoT systems
    - Big Data Processing and Analytics systems
  - Working group to debate and discuss on various implementation examples and to evaluate if a separate programme of work on GDPR and other privacy laws may be required as part of eGovernment domain
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• Conclusion
  • Key cybersecurity related topics pertaining to global trade that are being considered as part of eGovernment domain work programme
    • International Convention on Mutual Recognition mechanism
    • IoT Whitepaper Project
    • Digital ID for Trade
    • Electronic Notary Services
    • Data Retention
    • Artificial Intelligence for Trade Facilitation
    • GDPR and its implications

• Topics to discuss
  • Should conferences be taken on any of the subjects during 2019 Geneva Forum?
  • Suggestions for including other areas of work as part of eGovernment domain work program
Thank you