



# **INFORMATION ECONOMY REPORT 2013**

## *The Cloud Economy and Developing Countries*

**Cécile Barayre**

([cecile.barayre@unctad.org](mailto:cecile.barayre@unctad.org))

Programme Manager, E-Commerce and Law Reform

ICT Analysis Section, UNCTAD

23 April 2014

Presentation at P166 Short Course

# Outline

-  **Regulatory implications of cloud computing**
-  **UNCTAD's work on E-Commerce and cyberlaw harmonization**
-  **UN-wide Strategy on Cybersecurity and Cybercrime**

# Cloud Concerns

- ☁ Cloud data can become subject to multiple jurisdictions
- ☁ May trigger third party interest
  - Personal privacy, commercial secrecy, national security
- ☁ Government concerns
  - Data about citizens or of national security
- ☁ Key legal areas to address:
  - Data protection and privacy
  - Cybercrime



# Regulatory areas that may affect cloud

- ☁ Telecommunications regulations governing transmission services and possibly some value added services depending on the regulation
  - In some jurisdictions (e.g. Indonesia) telecom services include data processing services
  - South Africa: "information system services" are subject to special provisions
- ☁ Need to clarify which authority that has the supervisory role on cloud services (telecom regulator, national ICT agency, media regulator). Data protection, consumer-protection and competition agencies may be also involved.
- ☁ As far as known, Mexico is the only country that has adopted cloud-specific provision in relation to data protection.

# Multi-jurisdictional issues

- ☁ The transfer of data out of the user's jurisdiction may raise issues of control, effective oversight and audit
- ☁ For some regulated sectors, (e.g. financial services), data transfers and storage outside the jurisdiction may breach national rules
- ☁ Concerns related to the regulatory regime of the country of origin of the cloud service provider
  - Example of cloud service providers from the United States and US legislation (PATRIOT ACT)
  - Major cloud service providers regularly receive requests from various law-enforcement agencies to disclose customer data. Such disclosures may expose the cloud service provider to liability under the laws of the customer's jurisdiction
  - Some European providers have called for certification schemes that would indicate where data is protected from such access

# Data protection/privacy issues

- ☁ Difference between data protection and privacy: scope of rights and application
- ☁ No harmonized international privacy framework regulating cross-border transfer of data
- ☁ 101 countries have enacted privacy laws, or to have draft laws
  - 56 are developing countries
  - 5 LDCs
- ☁ Different approaches
  - EU law imposes general prohibition on transfers to jurisdictions without adequate protection
  - APEC Privacy Framework subjects data transfers to an "accountability" principle, but does not generally prohibit such transfers.



# Cybercrime

- ☁ The proliferation of cloud computing and the sheer concentration of users and data on rather few locations are an attractive target for cyber attacks
- Infiltration of network's infrastructure of 21 major companies including Google in 2009-2010
  - Hacking of 100 Kenyan official websites
  - Online banking theft



# Policy recommendations

- ☁ Address laws and regulations concerning privacy, data protection and cybercrime, aligned with leading international instruments
- ☁ Build capacity to ensure enactment and enforcements of laws
- ☁ Monitor regulatory developments and foster cross-border cooperation between regulatory and law enforcement authorities
- ☁ Establish and strengthen the capacity of CERTs
- ☁ Cooperate between law enforcement agencies from multiple countries
- ☁ Consider the need for building of data centres locally





# UNCTAD's work on cyberlaw harmonization

- ☁ E-Commerce and Law Reform Programme provides technical assistance in the preparation of harmonized legal and regulatory frameworks to more than 40 countries:
  - Raise awareness and build capacity of policy and law makers, including parliamentarians:
    - ✓ Online and face-to-face training course on the “Legal Aspects of E-commerce” : legal validity of e-transaction, consumer protection, taxation, security, privacy, IPRs, content regulation
  - Reviews of national laws and regional agreements: ASEAN, EAC, ECOWAS, Latin America
  - Preparation of regionally harmonized legal frameworks: ASEAN, EAC, ECOWAS
- ☁ Programme funded by Finland



# Cyberlaw harmonization in the ASEAN

- ☁ ASEAN frontrunner in harmonization
- ☁ Harmonization of E-Commerce Legal Infrastructure in ASEAN Project (2004-2008)
- ☁ First developing region to adopt harmonized framework for e-commerce laws
- ☁ ICT Master Plan 2015 sets targets for further harmonization
- ☁ Recognize need for continuous improvement of framework and to ensure effective implementation at national level
- ☁ Conscious of new challenges as result of evolving ICT landscape, including the Cloud

# Review of E-Commerce Laws Harmonization in ASEAN

- ☁ Takes stock of progress to date
- ☁ Surveys of 10 ASEAN Member States and of the private sector
- ☁ Regional workshop in 2012
  - 25 participants from all ASEAN Member States
  - Country presentations
  - Group discussions on key issues and priority legal areas
  - Needs assessment



Review published in 2013 and presented to the Telecommunications and IT Senior Official and Telecommunication Regulators' Council Leaders' in September 2013

# Status of e-commerce law harmonization in ASEAN (March 2013)

Member Country	Electronic Transactions	Privacy	Cybercrime	Consumer Protection	Content Regulation	Domain Names
Brunei Darussalam	Enacted	None	Enacted	Partial	Enacted	Enacted
Cambodia	Draft	None	Draft	None	Draft	Enacted
Indonesia	Enacted	Partial	Enacted	Partial	Enacted	Enacted
Lao People's Democratic Republic	Enacted	None	None	Draft	Enacted	Partial
Malaysia	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted
Myanmar	Enacted	None	Enacted	Enacted	Enacted	Enacted
Philippines	Enacted	Enacted	Enacted	Enacted	None	Enacted
Singapore	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted
Thailand	Enacted	Partial	Enacted	Enacted	Partial	Partial
Viet Nam	Enacted	Partial	Enacted	Enacted	Enacted	Enacted

Source: UNCTAD.

# Cyberlaw harmonization in ECOWAS

- ☁ Project started in 2013 in cooperation with the ECOWAS Commission
  - To support the implementation at the national level of existing legal frameworks on e-transactions (Supplementary Act A/SA.2/01/10), cybercrime (Directive 1/08/11) and personal data protection (Supplementary Act A/SA.1/01/10)
  - To review e-commerce law harmonization
  
- ☁ Building capacity of policy and law makers
  - 220 trained through distance learning (October 2013)
  - Two regional workshops (Dakar, February 2014; Accra, March, 2014)
  - New online course on the Legal Aspects of E-Commerce in October 2014
  - Review on cyberlaw harmonization - recommendations to further cyberlaw harmonization



# Privacy and Cybercrime in ECOWAS

	Privacy	Cybercrime
<b>Laws</b>	Benin Burkina Faso <b>Cape Verde</b> Cote d'Ivoire <b>Gambia</b> <b>Ghana</b> Senegal	Cote d'Ivoire <b>Gambia</b> <b>Ghana</b> Senegal
<b>Bills</b>	<b>Liberia</b> Mali Niger <b>Nigeria</b>	<b>Cape Verde</b> <b>Liberia</b> Burkina Faso Niger <b>Nigeria</b>

# UN-wide Strategy on Cybersecurity and Cybercrime

- ☁ UN-wide framework on Cybersecurity and Cybercrime (ITU, UNODC); Compendium on UN mandates on cybersecurity Inter-agency
- ☁ UN-wide Strategy on Cybersecurity /Cybercrime and Policies on Information
  - UN's internal preparation against cyber threats
  - UN's assistance to Member States in the post 2015 development agenda
  - UN's coherence and coordination
  - Facilitating discussion with Member States for a comprehensive and inclusive international framework for cooperation in the field of cybersecurity
- ☁ UNCTAD is a member of the Steering Committee as well as ITU, UNESCO, UNODC, and UNDP and of the Working Group on Cybersecurity, Cybercrime and Policies on Information

**THE INFORMATION ECONOMY REPORT 2013**  
can be downloaded free of charge at  
[unctad.org/ier](http://unctad.org/ier)

**UNCTAD**  
PROSPERITY FOR ALL

<http://unctad.org>



UNITED NATIONS  
UNCTAD