UNITED NATIONS ESCAP
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Connecting economies
and empowering people

ESCAP Committee on ICT
Third Session

Item 5: Technological innovations and knowledge-networked societies: new sources of sustainable and inclusive development

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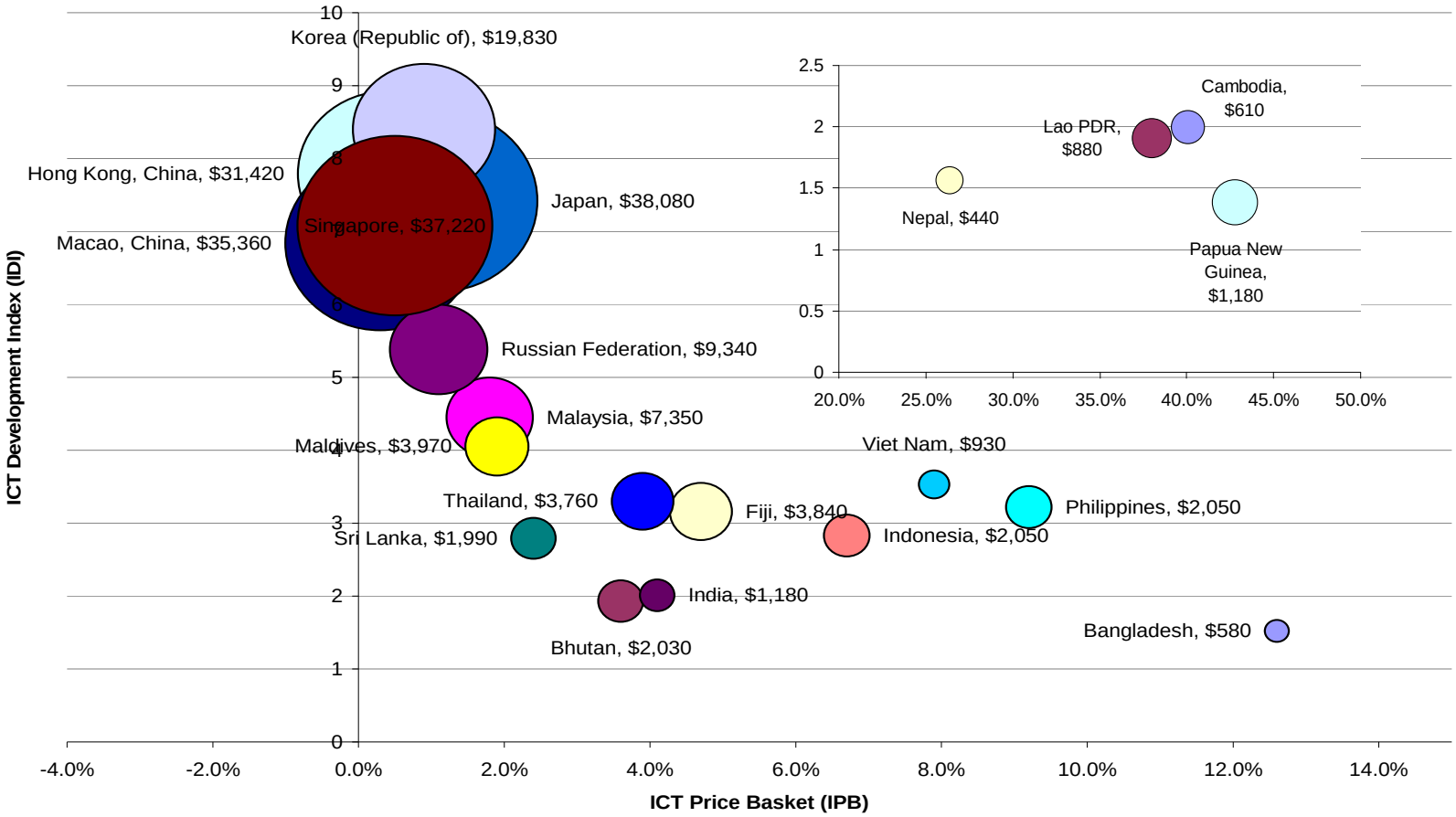
Tiziana Bonapace
Chief
ICT and Development Section
ICT and Disaster Risk Reduction Division (IDD)
United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Key technology trends for knowledge-networked societies

- Sensor based computing and Internet of Things;
  - The proliferation of connected sensors and wireless networks is next wave of internet evolution
- Big data and open data;
  - Provision of data by private and public sectors combined with intelligent software analytics is transforming data into meaningful information revealing trends and patterns that can provide intelligence to policymakers across all policy domains
- Cloud computing;
  - Cloud computing opens up a wide range of opportunities in service based computing, but challenges regarding protection of data, privacy, safeguarding storage, interoperability, confidentiality
- Convergence of content, telecommunication and media;
  - ICT has become an integral part of human society, blending virtual and real worlds, with information and knowledge potentially available to anyone, anywhere and at anytime, but challenges, especially ethical norms
- High-value manufacturing;
  - Advances in ICT-enabled manufacturing continue to have a major economic and social impact, with productivity gains, and new waves of innovations unleashed in a virtuous circle.

The growing digital divide in Asia and the Pacific



***Sources*: Data from International Telecommunication Union, *Measuring the Information Society 2011* (Geneva: International Telecommunication Union, 2011).**

A new Social Compact in ICT

- A new Social Compact in ICT between **government** and **commercial interests** to harness broadband connectivity in a meaningful way.

  - (a) Broadband infrastructure as a **meta-infrastructure** that underpins other ICT, as well as transport, energy and communication infrastructure networks;
  - (b) **Leadership** in business and government for societal change;
  - (c) A new genre of **public-private partnerships (PPP)** that combine commercial goals with public policy objectives;
  - (d) Regulators as a mediator between the public and private sectors in a new **broadband era** that is raising new issues of security, privacy, spectrum management and intellectual ownership;
  - (e) **Ethical** and **social** implications of new technologies.

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personalized services to everyone, regardless of location, while delivering **cost**
atients and society at large

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ng policy approaches with broadband unleashing transformative potential with
s to society

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untability and interaction between public administrations, citizens and businesses

garding regulatory environment to balance the advantages of **flexibility** and
n the need to protect consumers.

d and more efficient traffic, water and energy management systems, but also e-

ness and management

ion at right time to right people, to **minimize the risk** of recurring disasters and
s.