



Why E-Policy Matters: New ICT Indicators for Knowledge Economy

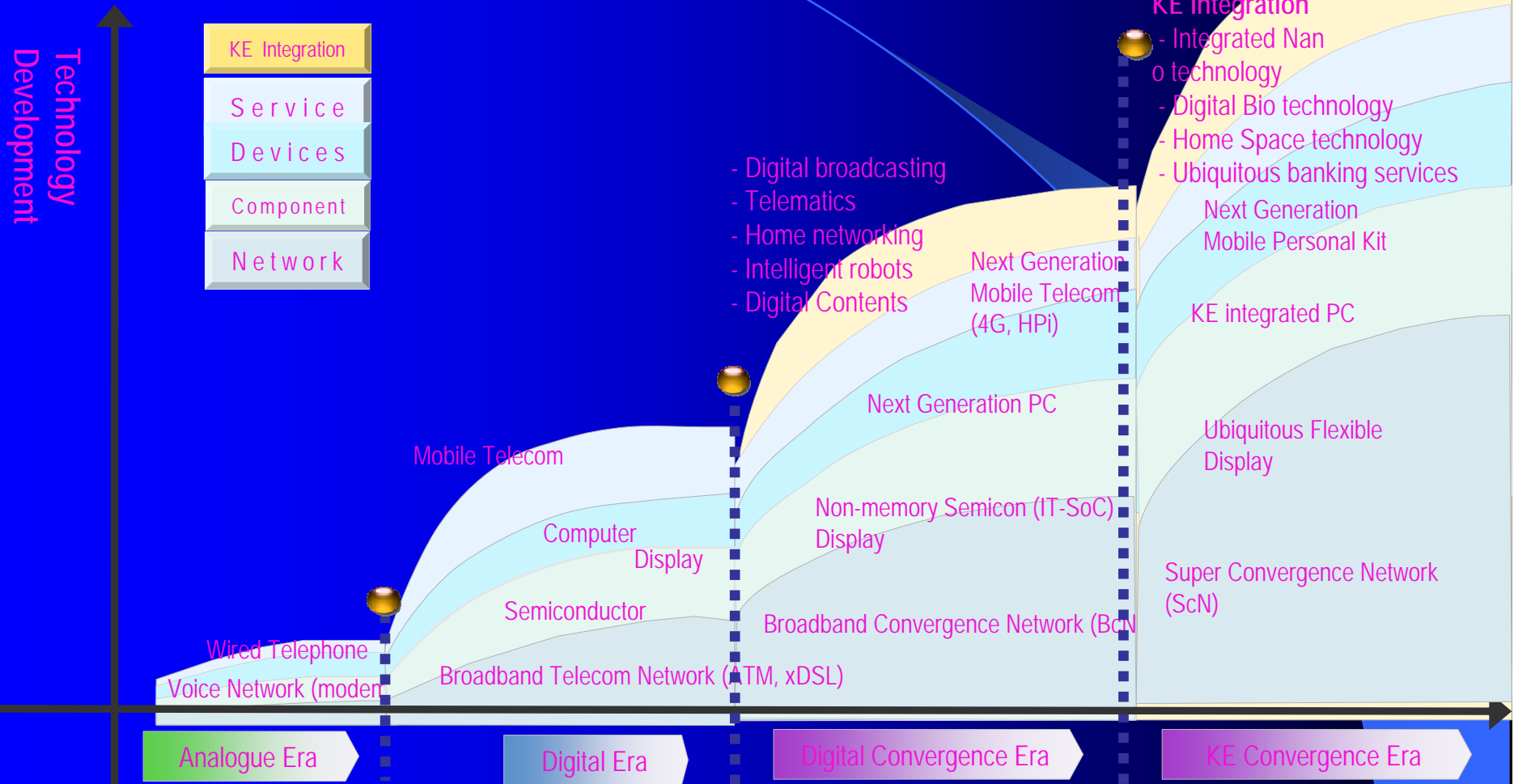
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**Q&A. Is car a mobile ICT
product?**

**If so, what classification should
apply?**

Convergence on Knowledge Economy



Source: ESCAP secretariat based on NCA 2006

Regulatory Changes

Analytical Framework on Techno-Regulatory Convergence

Digital Tobin's q ?

1. Tobin's q:

Market value of K / Replacement cost of K

$MPK / 1 + r$, $0 < q < 1$, $q > 1$

$MPK / 1 + r = 1 + p$ (p = additional cost)

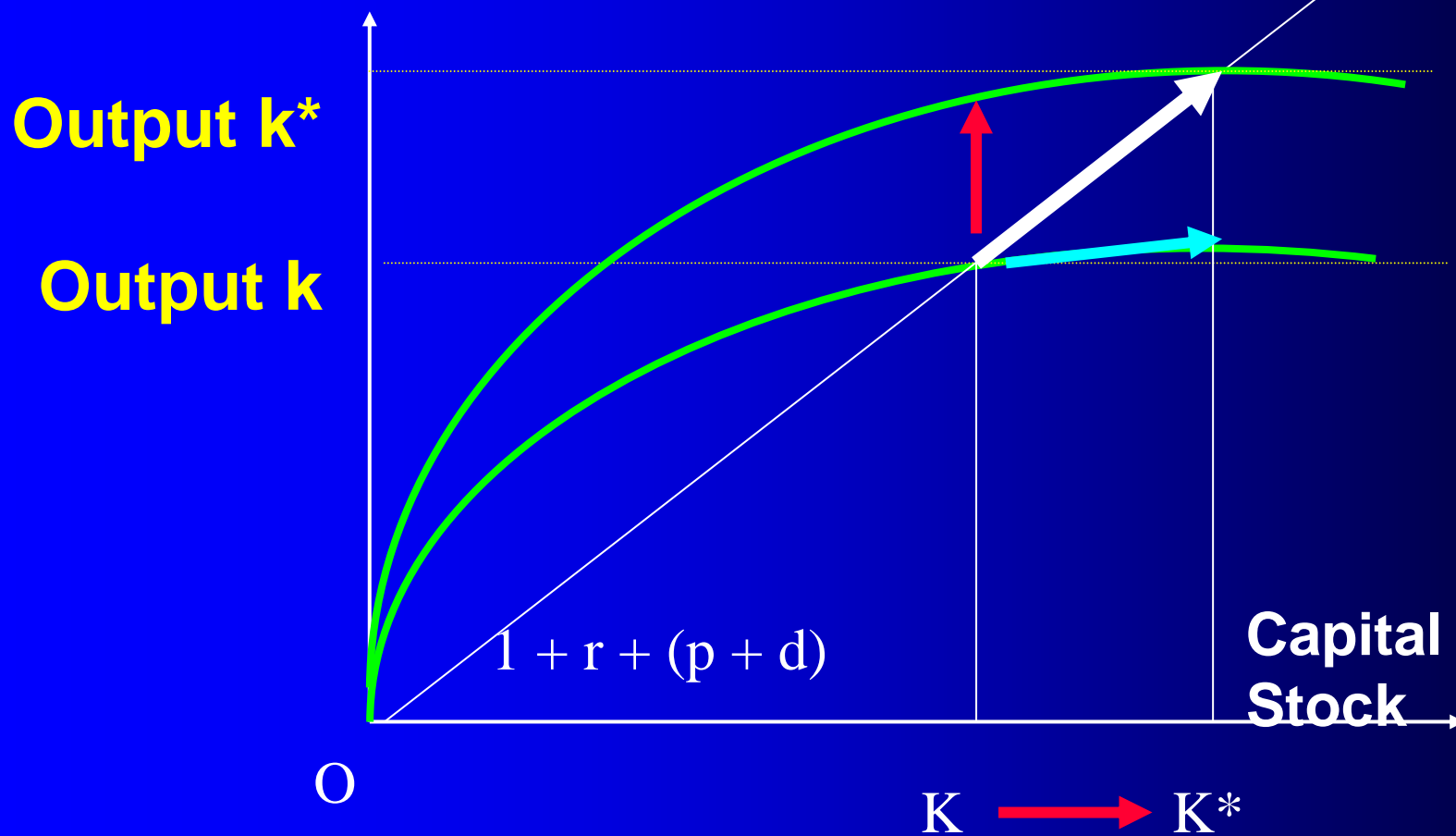
2. Digital Tobin's q:

Market value + Digital Marketplace value of K* /

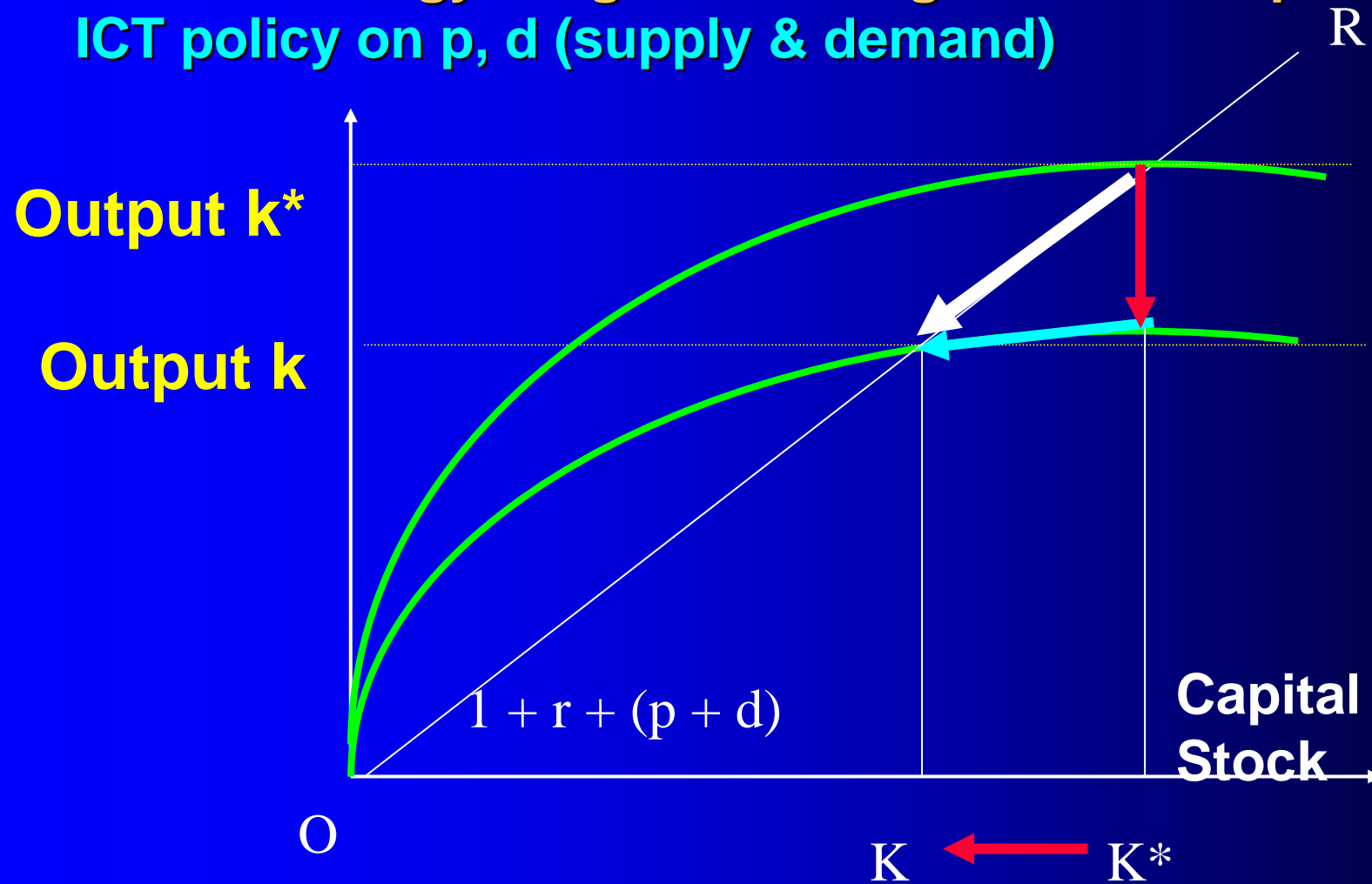
Replacement cost + Digital replacement cost of K*

$MPK / 1 + r = 1 + p + d$ (d= digital cost: efficiency, effectiveness, equity)

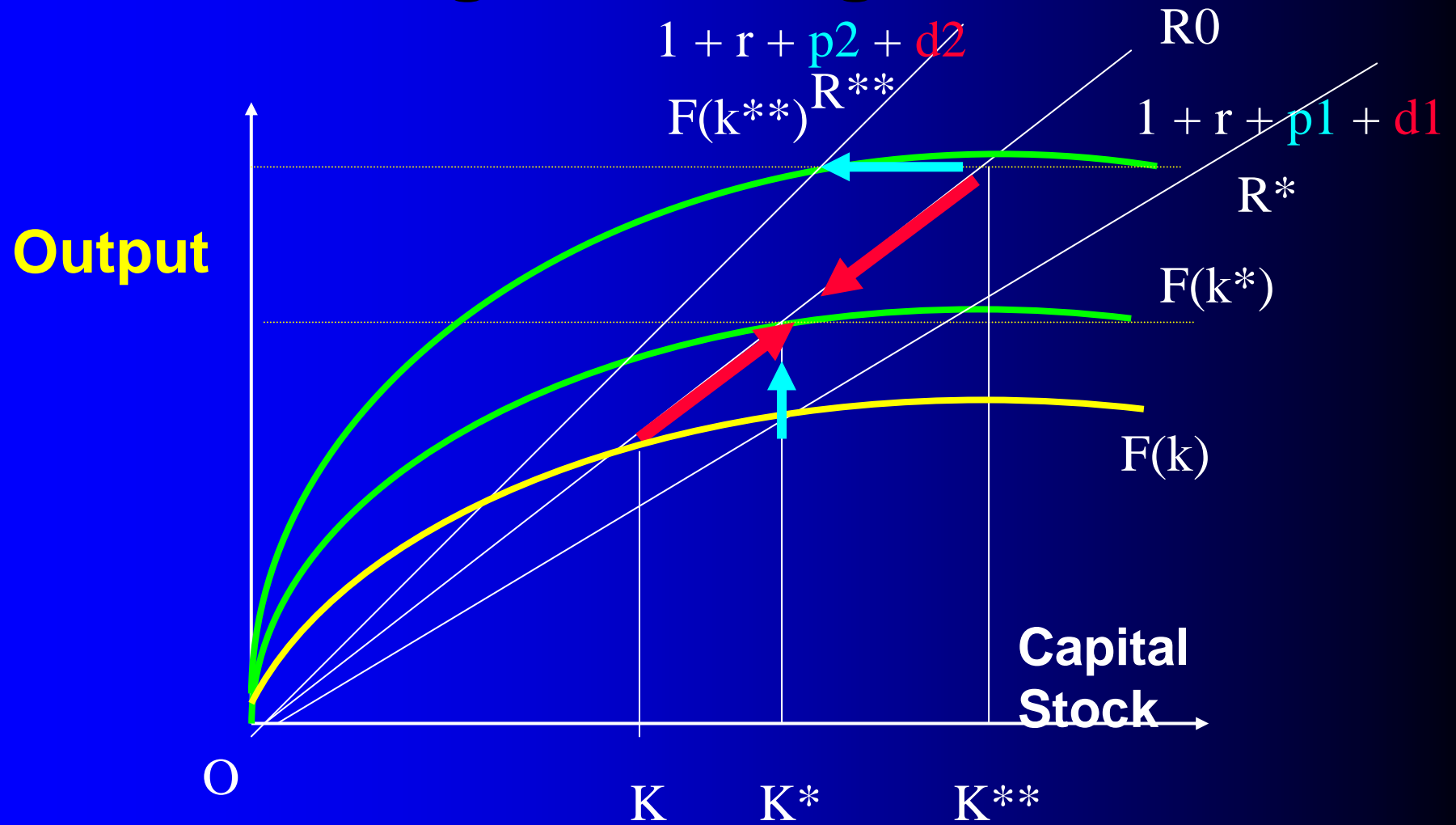
KE Technology Progress Vs. Digital Tobin's q: Impact of ICT policy on p, d (supply & demand)^R



KE Technology Progress Vs. Digital Tobin's q: Impact of ICT policy on p, d (supply & demand)



Techno-legal convergence for KE

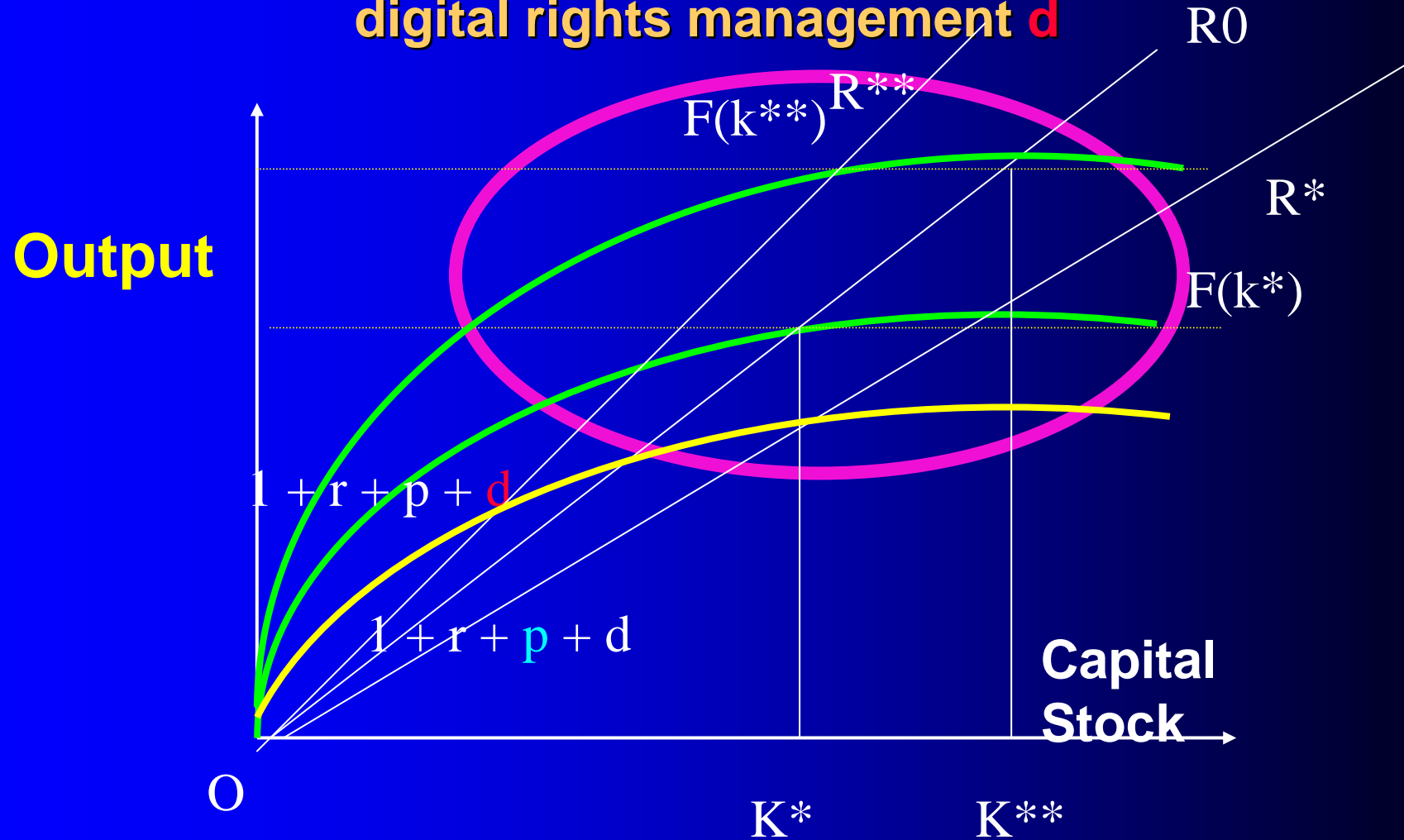


Contribution of KE Policy on Techno-Regulatory Convergence

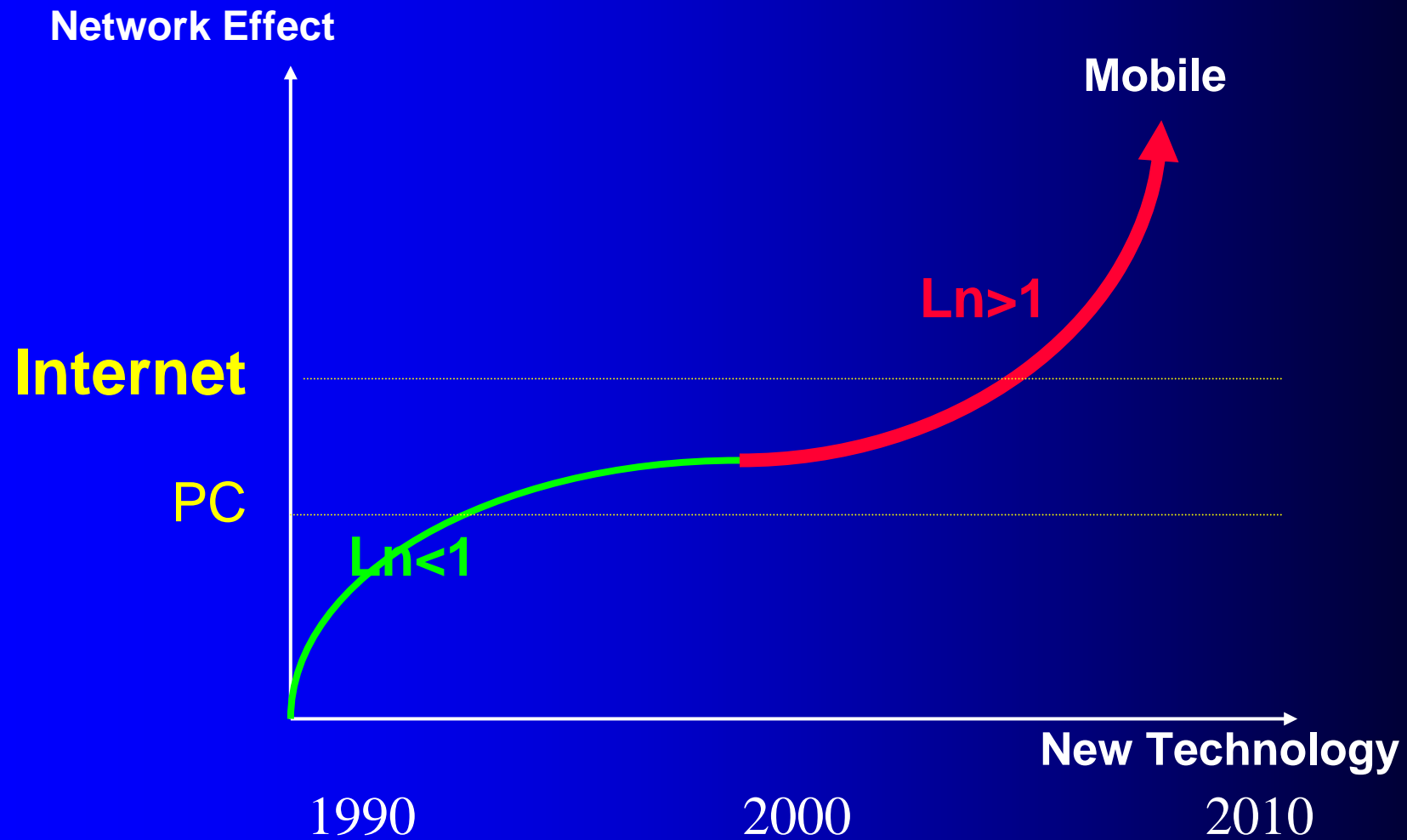
- **Conventional ICT Indicators: $1+p1$**
 - $P1$ =ICT infrastructure
- **New ICT Indicators: $1+r+p^*+d$**
 - r =economic policy
 - p^* =ICT infrastructure
 - d =digital rights management
 - Examples of d :
 - Cyberspace disputes: data protection, digital rights management
 - Technical innovation: odrXML, digital certification recognition
 - Legal framework: cross-border jurisdiction and applicable law
- **New ICT Indicators for KE: $1+r+p^*+d+p^{**}+kd$**
 - p^{**} =new technology infrastructure (bio, nano, etc.)
 - kd =knowledge-based rights management

E-Policy and New Indicator Areas:

Investment p ,
digital rights management d



The Case of Mobile Economy in Asia



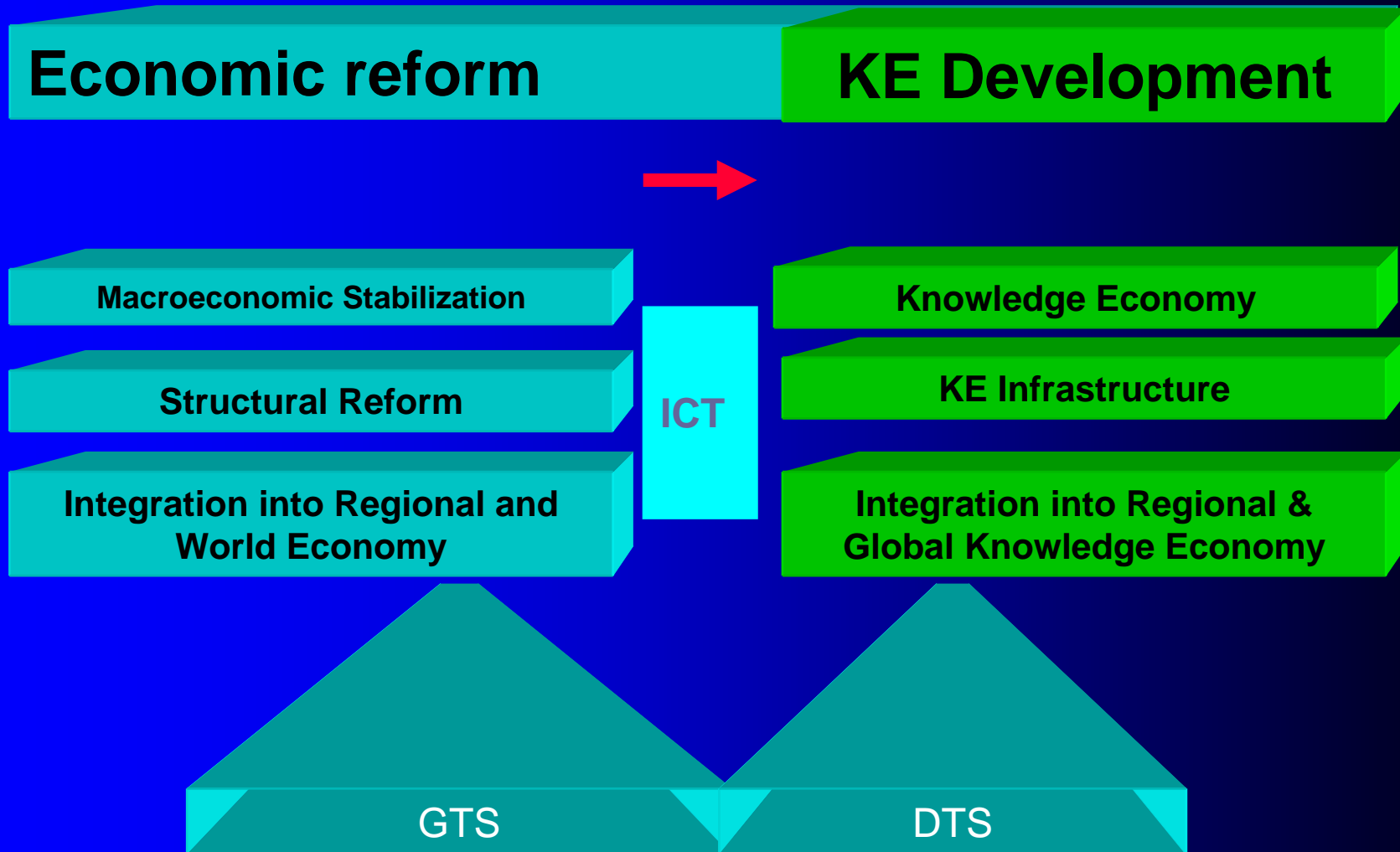
Source: DWC 2001

KE Path

2000

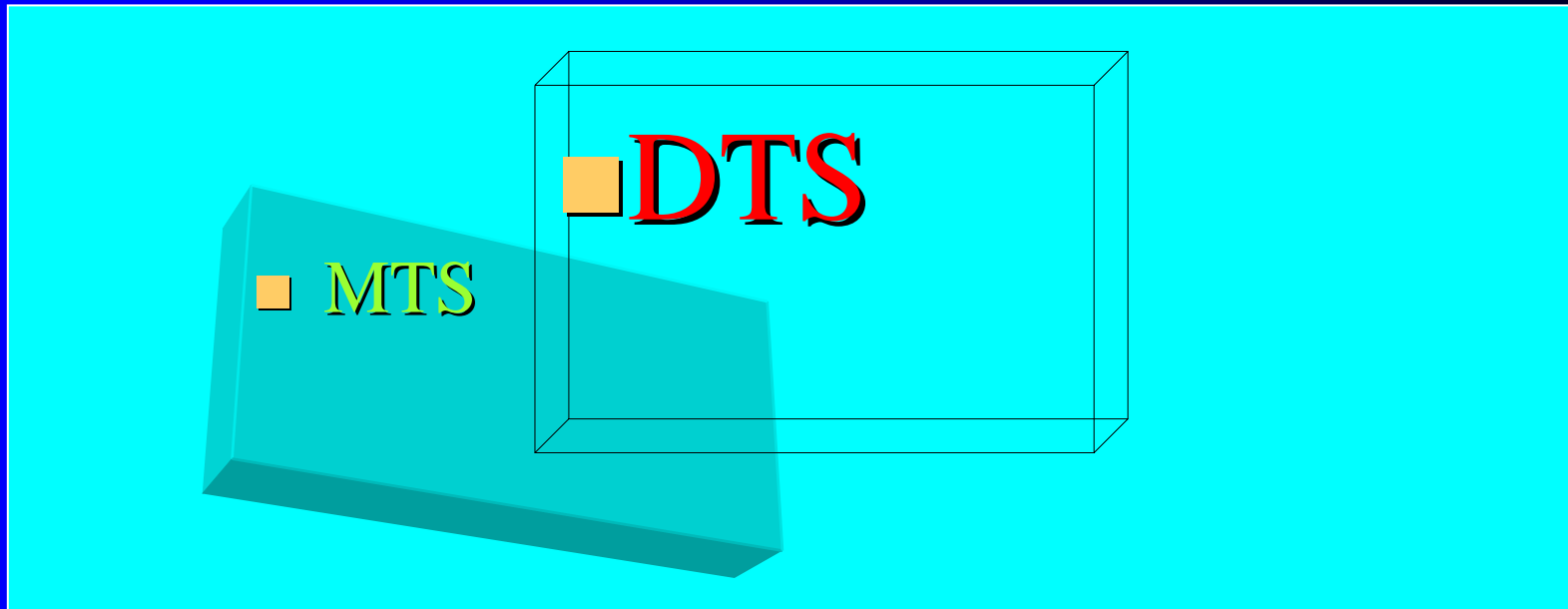
2010

2020



Meta Coordination of Knowledge Economy

Global Trading System (GTS)
= f(MTS, DTS)



MTS: Multilateral Trading System

DTS: Digital Trading System

WTO E-Commerce Programme



EU E-Europe (+) Initiative

Dispute
Resolution

Secure
Transaction

Data
Exchange

ADR. Art 17, E-
C Dir 2000/31

Proposed Dir
VA

E-Sig Dir
99/93

E-Money Dir

Database
Protection Dir 96/9

Personal Data
Protec Dir
95/46

International
Trade

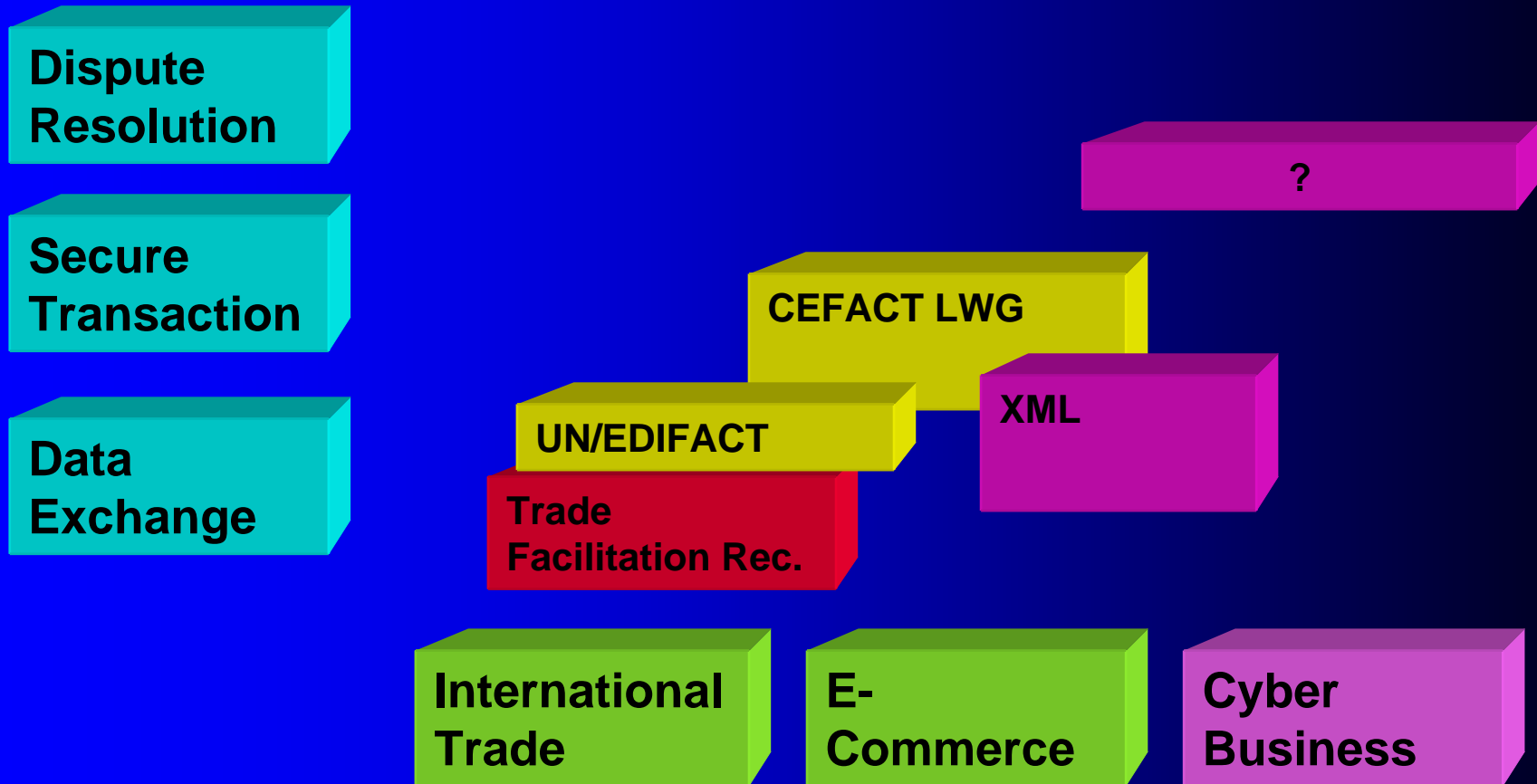
E-
Commerce

Cyber
Business

WIPO Digital Agenda



UNECE CEFAC



Example: ICT

$GTS=f(MTS, DTS)$



Thus,

- E-Policy matters for ICT Development
- ICT matters for KE Development
- ICT Indicators need to be in the new Context
- ICT Indicators for KE requires further work (eg. OECD, EU, ESCAP)
- Regional cooperation is a key factor.
- ESCAP mandate on multisectoral economic development bodes well with ICT/KE policy issues
- International cooperation needs to be further enhanced.

- Thank you