LIFTING-THE-BARRIERS REPORT FOR ASEAN CONNECTIVITY
Management of mobile services the key to better ASEAN telecommunication integration
**Research objectives:**

The CIMB ASEAN Research Institute (CARI) in collaboration with the ASEAN Business Club (ABC) launched the Lifting-The-Barriers (LTB) Initiative in early 2013 as an integrated year long research platform involving core research as well as stakeholder engagement.

The objective was to adopt a vertical approach by means of identifying bottlenecks and barriers hindering free trade of prioritised sectors in the context of the ASEAN Economic Community (AEC).

The LTB Initiative targets six identified sectors which have pressing relevance to the business landscape in ASEAN and will play a major role in the successful formation of the AEC. The six sectors were Connectivity, Healthcare, Aviation, Capital Markets, Financial Services and Infrastructure, Power & Utilities.

Two leading ASEAN corporations were selected to champion each sector, providing the direction and experiential insight into their industry. The input from these champions, or chair organisations, were key to understanding the issues faced by industry stakeholders and to develop the recommendations as part of the discourse.

CARI’s Research Working Committee and its Strategic Advisors also worked closely with each of the six nominated Research Partners in producing these reports.

The Research Partners were either top management consulting firms and academic institutions who provided the technical knowledge and quantitative analysis required.

**Phase I: LTB Preliminary Research**

Phase I of the LTB Initiative involves core research and compilation of qualitative and quantitative responses as surveyed from within each of the six business sectors. The outcome of Phase I are the six sector-based Preliminary Papers, intended to provide a base to build discussions on in the next phase.

**Phase II: Network ASEAN Forum (NAF) 2013**

The NAF was designed to convene six sector based roundtables with the aim of identifying barriers. The NAF served as a platform for different stakeholders to deliberate on relevant issues and to collectively propose viable recommendations to remedy them. Participants of this discussion include regulators, private sector leaders, service providers, manufacturers, academics and many more. The selection of discussants aimed to provide a well rounded and reflective debate.

**Phase III: Launch of the LTB Reports**

The third and final phase of the LTB Initiative saw the consolidation of all research and discussion materials from Phase I and Phase II. Phase III involved the launch of the final LTB Reports, as a set of white papers presented to the relevant ASEAN policy makers.
1. ASEAN mobile market
- Represents around two thirds of the revenue pools in all members countries (except Singapore)
- Generated US$12 billion in Q1 of 2013 alone
- Positive growth across ASEAN over the past three years, ranging from 2.5% to 12.1% between different countries
- Highly concentrated - with several dominant providers controlling majority of the market share on connections.
- Most players also focus solely on their domestic markets
- Only a few providers have assumed a regional role
- One important recent phenomenon in the shift to mobile data usage is the advent of smartphone access and the strong 3G rollout by operators

2. ASEAN Fixed line markets & mobile internet
- Fixed connections are in a continuous decline across ASEAN due to increased mobile adoption and, in many markets, limited legacy last-mile infrastructure to residential homes.
- Internet and broadband connections are expected to grow rapidly albeit from a low base.
- Many governments have recognised the need for advanced fiber infrastructure to further create growth and drive a more knowledge-centric economy and have implemented national programs to facilitate this.

Key indicators by country (2013 Q1)
- Mobile market in ASEAN is worth US$12B in 2013 Q1
- Mobile connections are in a continuous decline across ASEAN due to increased mobile adoption and, in many markets, limited legacy last-mile infrastructure to residential homes.
- Internet and broadband connections are expected to grow rapidly albeit from a low base.
- Many governments have recognised the need for advanced fiber infrastructure to further create growth and drive a more knowledge-centric economy and have implemented national programs to facilitate this.
# BARRIERS AND RECOMMENDATIONS

The study identifies four key barriers to deeper integration in the ASEAN connectivity market.

## 1. INTRA-ASEAN ROAMING AND IDD

<table>
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<tr>
<th>Barriers</th>
<th>Recommendations</th>
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<tr>
<td><strong>International Roaming and international Direct Dialing (IDD)</strong> have become increasingly relevant as ASEAN becomes more connected.</td>
<td>Devising a new regional framework to address high roaming and IDD charges is crucial to developing the connectivity landscape in the region.</td>
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<td>The increasing number of pan-ASEAN business people and migrant workers create a strong demand for these services.</td>
<td>A successful framework must manage the fine balance between several competing forces:</td>
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<td>Relatively high roaming charges and price variability are currently inhibiting adoption of international roaming and IDD.</td>
<td><strong>LOWER PRICE FOR CONSUMERS</strong></td>
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<td>Even though multiple bilateral initiatives have been implemented to reduce roaming costs, there is no comprehensive “common ground” at the regional level yet.</td>
<td>- ASEAN should use the EU model of driving down cost as a blueprint to lower prices for consumers.</td>
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<td>The ASEAN Telecom Regulatory Council (ATRC) had adopted an addendum aimed at reducing roaming charges but it has not been equally used in all ASEAN countries.</td>
<td><strong>BALANCING PROFITS OF TELCOS</strong></td>
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<td>Well managed roaming rates will likely have positive effects through improving ASEAN-wide communications.</td>
<td>- Driving roaming costs down must be achieved without compromising telco profits.</td>
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<td>The lack of holistic pricing regulation and the absence of a common regulatory body have hindered growth.</td>
<td>- Losing profits ultimately causes telcos to delay rollout of infrastructure or upgrades, given the low penetration.</td>
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<td>Lower charges would not necessarily negatively affect mobile operator profitability due to demand elasticity.</td>
<td>- The EU example may be seen as a guiding case study to avoid where regulations played a major role in reducing costs yielding significant benefits in adoption and usage but to the detriment of telco balance sheets.</td>
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<td>Robust roaming guidelines can also create a more level playing field for domestic carriers who are competing with pan regional players with attractive regional roaming propositions on their linked operators.</td>
<td><strong>INCREASING COMPETITION FROM OTT</strong></td>
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<td>- OTT messaging has widely replaced SMS usage and is slowly substituting voice roaming as well</td>
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<td></td>
<td>- Capitalising on these trends will significantly benefit ASEAN mobile operators - by retaining profits in ASEAN - where OTT is usually offered by global providers</td>
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### Regional Framework

- **Adopting a regional framework would provide a platform to forge greater partnerships among regional telcos to leverage** on each others networks.
- **The framework offers a win-win scenario to both regional and domestic telcos** as such partnerships give access to a larger market base.
- **This would alleviate any issues of smaller telcos losing out to bigger operators coming into their markets as well as ease the market entry of larger telcos.**
**2. MOBILE ADVERTISING**

- **Mobile advertising** is still in its infancy in the ASEAN market.

- In 2012, only 7% of internet advertising was spent on mobile advertising whereas 18% of total internet traffic was from mobile users.

- To promote growth of mobile advertising, three key trends need to be considered:
  1. Advertisers will increasingly recognise the importance of this segment and gravitate towards this channel.
  2. Distributors of mobile advertising will **intensify competition** for advertising delivery.
  3. Consumers will have better appreciation of privacy protection and tolerance for irrelevant or inappropriate advertising content.

- **Mobile advertising spending** **CAGR is expected to be from 20% up to 40% until 2017.**

**RECOMMENDATIONS**

- Regulators can play a pivotal role in encouraging and developing this market by focusing on three initiatives:
  1. **Defining guidelines for consumer privacy** notably covering the right to access and delete personal data, sensitive information sharing, use of data for advertising purposes, resale of data, security of data storage and record keeping.
  2. Setting up **consumer friendly policies** for opting in/opting out to address advertising concerns, mirroring policies in more mature markets.
  3. Creating a **designated national authority** to monitor telco performance, behaviour and for conflict resolution.

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**3. MOBILE PAYMENT**

- Mobile payments are another emerging trend in the connectivity market.

- This form of transaction has huge potential to **create added value** for consumers, operators, the financial services sector and merchants across the region.

- **Significant portions of the population is still not served by a formal financial sector.**

- While the number of banked population has been growing steadily over the last few years, the number of mobile users has increased sharply providing an opportunity to serve via a mobile channel to customers not reached by traditional banking services.

- **Opportunities in mobile money include:**
  - M-wallet
  - Mobile Commerce
  - Mobile Banking

**RECOMMENDATIONS**

- Regulators can help foster the development of the mobile payment segment in ASEAN by:
  1. Providing a robust **regulatory framework that clarifies roles, boundaries and pre-requisites** for:
     - telco operators
     - financial services companies
     - merchants
  2. Managing and monitoring transaction fees, consumer privacy, forbidden uses and applicable controls to protect consumers, ensure broad participation, and prevent problems such as fraud, money laundering and illegal lending or gambling.
  3. Selectively guiding which services/platforms should be open to different technologies/standards (to create a level playing field, prevent customer lock-in and stay on top of technology evolution) vs. where a common standard is needed (to ensure interoperability and stimulate investment).
## 4. Competition Intensity

### Maintaining competition in ASEAN

- In ASEAN, maintaining competition is crucial to the healthy development of the connectivity market.

- Currently, there is fierce competition among the few telco operators, and between them and OTTs.

- But competition in this market is primarily based on price rather than value or quality of services; which in combination with deregulated interconnect charges and on/off net price differences, create dysfunctional market behaviors such as the multi-SIM.

- Some remaining barriers to competition create unnecessary inefficiencies in the connectivity market, such as the incomplete number portability within ASEAN.

## Recommendations

A comprehensive look at competitive dynamics in the connectivity market should encompass these three aspects:

### Spectrum and license allocation

- This is a key regulatory activity and will significantly shape the nature of competition. Regulators can auction the number of spectrum blocks, regulate the number of players allowed and the price levels.
  - Example: Malaysian regulators awarded nine LTE licenses which will lead to new mobile operators entering the market.
  - Example: There have also been efforts to harmonise the mobile broadband between Singapore, Brunei, Malaysia and Indonesia which will allow use of a common frequency band enabling consumers to roam cross networks and cross borders seamlessly.

### Interconnect rates

- Regulators can set a variety of interconnect rates (mobile-to-mobile, mobile-to-fixed and SMS) to compensate telcos for utilising each others networks. This is a key lever to reduce the benefits of incumbency and enable competition.
  - Example: Thailand based telco AIS, DTAC and True Corp have agreed to lower their interconnecting fees with the support of their regulator, NBTC.

### Fiber roll-out

- National broadband networks are the key priority for most ASEAN countries. Given the significant costs, varying forms of PPPs can be introduced. Individual telcos have limited capacity to roll-out networks of their own.
  - Example: Singapore opted for a structural separation with the government paying for the roll-out, driving stronger levels of retail competition.
  - Example: Malaysia has provided additional funding to Telekom Malaysia who in turn offers wholesale access at regulated rates.