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RBF/OBA Experiences in the ICT Sector

ESMAP Results-Based Approaches Conference

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1. World Bank Interventions and ICT Strategy

2. Examples of World Bank projects with RBF/OBA approaches

3. Assessment of results

WB involvement in the ICT Sector

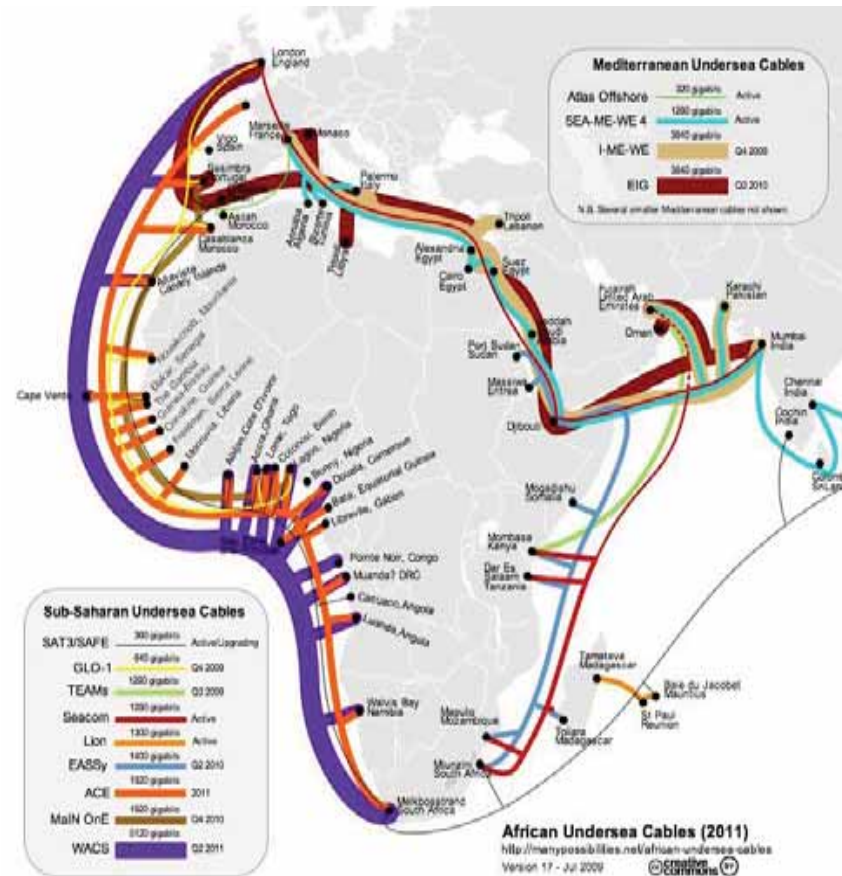
- **The Bank has helped reform the ICT sector in more than 90 countries over the last ten years** by introducing competition, helping privatize incumbent operators, revamping regulatory frameworks, and building regulatory capacity, with a strong focus on low-income countries. **IFC** with investments of \$2.3 billion in telecommunications and **MIGA** with political risk guarantees of over \$550 million—supported private sector expansion of infrastructure for mobile telephony in difficult and high-risk markets

- **Mobile revolution triggered by reforms and private sector investment is helping alleviate poverty.** With 5 billion mobile phones in developing countries, mobile phones are today the largest delivery platform for services. They are being used to deliver banking, health and education services, among others. **ICTs are no longer a luxury good—they're an essential utility, including for the poor.**



• Since 2007 the Bank has approved regional connectivity programs (WARCIP, CAB, RCIP...) amounting to \$1.2 billion involving more than 30 countries either approved or firmly in the pipeline.

- Growing widespread acceptance of the benefits of broadband infrastructure matched by low levels of coverage and take up has unleashed a **global race to deploy broadband**.
- **ITU's Broadband Challenge to the world** (raising broadband penetration - broadband for all - in developing countries from 10% to 50% by 2015) is **widely endorsed** by governments and private sector.
- The “easier” submarine cable international connectivity projects are being completed, leaving the **more challenging terrestrial backbone networks** (“missing links”) to be financed and operated.



ICT Sector Today:

Opportunities and Issues

- 5 billion **mobile phones** in developing countries offer new ways to deliver services
- **Broadband** penetration is low but growing, and can be a foundation infrastructure for competitiveness and economic growth
- **IT-based industry** shows high growth (40% CAGR) with a bias towards youth & women
- Mobile-based and geo-spatial ICT tools offer new opportunities for greater transparency and citizen engagement, towards **open and accountable development**
- **IT applications** offer a high-reward but high-risk opportunity to transform the way services are delivered

WBG ICT Strategy

- **Transform** – Use ICT to transform service delivery across sectors
 - Promote open and accountable development using open government, open data, and aid accountability
 - Transform service delivery using ICT applications in economic and social sectors, and establishing cross-sector foundations
- **Innovate** – Support ICT innovation for jobs and competitiveness across industries
 - Promote ICT skills to develop competitive IT-based service industries in selected countries
 - Promote ICT-enabled productivity gains across industries
- **Connect** – Scale up affordable access to broadband internet
 - Support policy and institutional reforms for private investment in broadband
 - Selective support of PPPs in frontier markets to promote affordable access for all

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Main areas of focus:

- **Rural Access:** Most projects include support to Universal Service Funds / OBA in more than 30 countries
- **Backbone development:** New generation of connectivity projects, support both at the regional and national levels
- **E-government PPPs:** a few projects innovative RBF approaches for E-gov service delivery

Type of World Bank support:

- Technical assistance for design of OBA scheme, regulatory instruments and bidding documents
- Financing provision of subsidies for infrastructure roll-out

Rural Access examples - Nicaragua

- Creation of a rural telecommunications development fund (FITEL)
- Broadband internet points of presence installed in 101 (out of 153) municipalities throughout the country
- Thirty-six radio base stations provide coverage for rural communities
- 104 telecenters in rural communities
- 600 public phones installed in rural areas that did not have a public access point before
- Additional Financing under preparation: target 40 underserved communities in 20 municipalities in the Caribbean coast

Rural Access examples - Mongolia

- Universal Service Fund demonstrated high demand for services in rural areas
- All of Mongolia's 335 soums received access to mobile voice service;
- Public access in 1500 herder communities reduced average travel distance to a phone from 39 km to 15 km;
- 34 prime soum centers received broadband Internet access at same rates as in the capital;
- Schools were connected at discounted rates;
- All 34 communities received access to public Internet cafés.

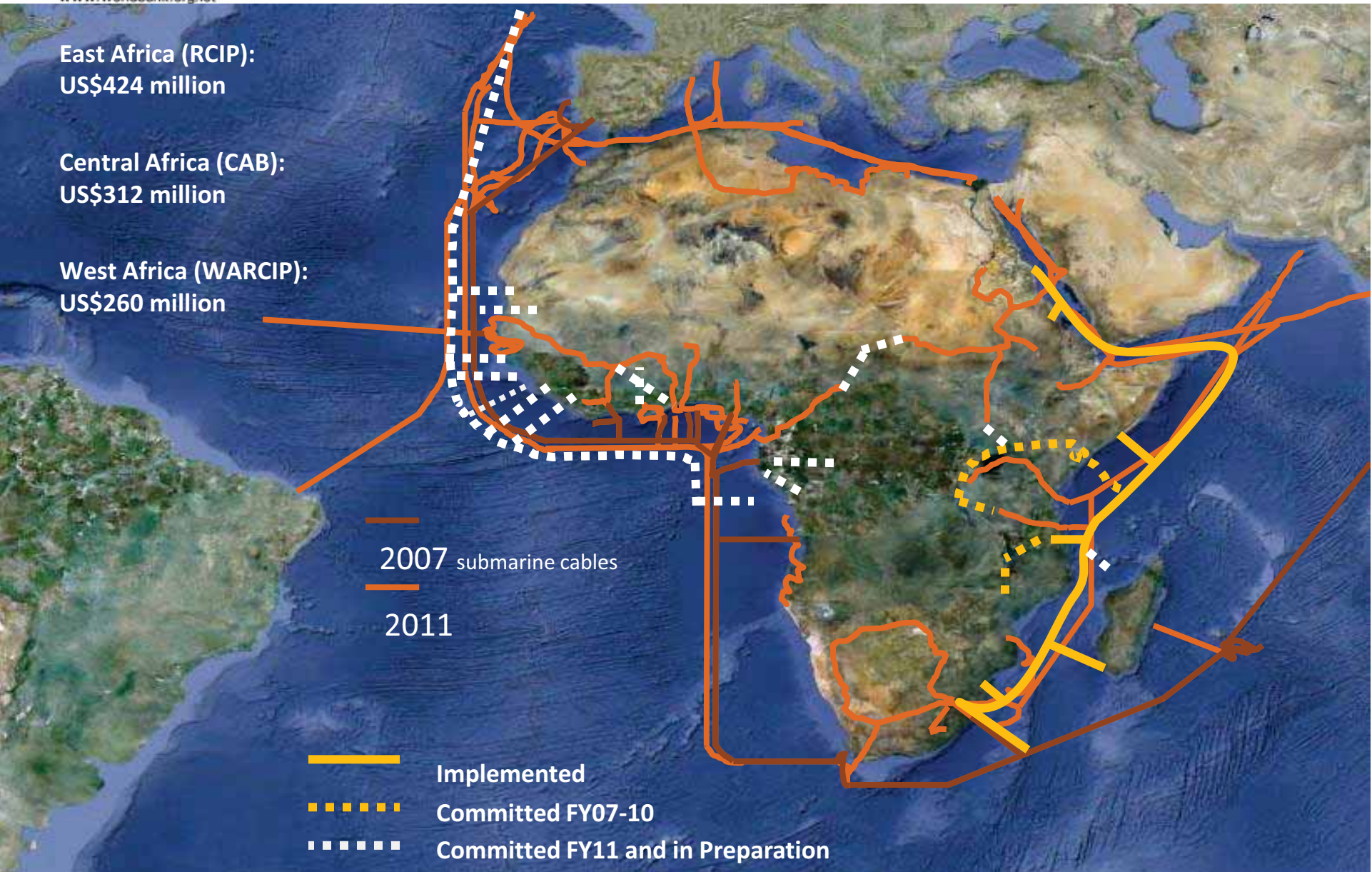
Summary of results of OBA in Rural Access (Bank and non-Bank)

Country	Period	Localities	Population (000)	Subsidy granted (US\$m)	Subsidy per locality (US\$)
Chile	1995-97	4,504	1,650	10.2	2,256
	1998-99	1,412	500	9.8	6,919
	2000	143	50	1.8	12,727
Colombia	1999	6,745	3,750	31.8	4,715
	2002	3,000	1,600	N/A	N/A
Dominican Rep.	2001	500	770	3.4	6,800
	2004	1,500	2,200	6.4	4,270
Guatemala	1998	202	200	1.5	7,587
Mongolia	2006-2010	311	472	5.75	18,000
Nepal	2003	1,068	3,200	11.8	11,100
Nicaragua	2005	366	348	0.9	2,459
Nigeria	2005	558	2,657	6.13	10,986
Peru	1999	1,051	1,100	4.5	4,282
	1998	213	75	1.7	7,981
	1999	1,937	700	11.0	5,700
	2000	2,290	825	27.8	12,100
Uganda	2005	1,550	3,600	5.72	3,688

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World Bank backbone projects: Africa



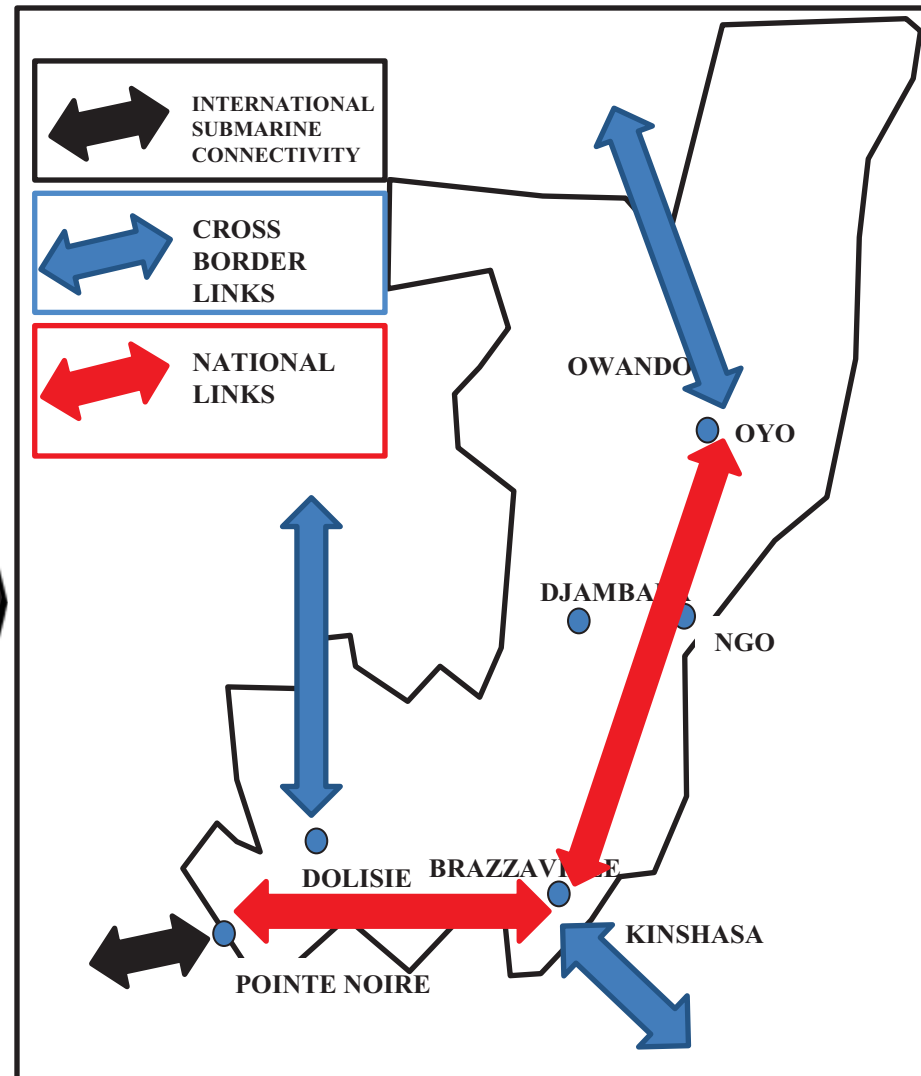
Congo Brazza PPP (Concession Model)

- **Problem**

- Limited broadband
- Most of the backbone was destroyed during the war
- Need for non-oil diversification

- **Strategy**

- Government to contract with private operator on a Build Operate and Transfer (BOT) model to develop and market 3 cross border links (US \$ 18 million)
- Private operator owns a license to provide backbone wholesale services only
- WB project finances “least subsidy” using OBA mechanism, no public ownership; Private sector investment
- Wholesale prices, service level agreements (SLA), key performance indicators (KPI) etc., may all need to be regulated
- WB project also finances (US \$ 3.3 million) studies to support policy and institutional reforms



Caribbean Regional Communications Infrastructure Program (CARCIP)



CARCIP (US\$ 62 million – Board in May, 2012):

- Connectivity: OBA for provision of access to submarine cables, national backbone networks, government networks
- Support to regional ICT industry
- Platforms for e-services

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- OBA approach demonstrated that competition for subsidies dramatically reduces cost of providing universal service/access
- Teledensity was not greatly increased through OBA, but it had a dramatic impact on access (e.g. in Peru average distance to nearest public phone was reduced from 56km to 4km)
- Generally, universal service funds when managed by the independent regulator with a separate oversight mechanism, have had modest overheads of between 0.5% and 5% of the funds collected

Assessment: What Did Not Work That Well

- In the early OBA tenders, focus on public telephony without notion of coverage led to costly satellite solutions which provide only one point of service per village
- In some cases (e.g. Brazil), funds have been diverted to other purposes, due to their size, insufficient immunity to political control and lack of flexibility in the design of eligible projects
- In other cases (e.g. Indonesia), size of collections too small to face the required investments expected from the fund
- In countries with less than liberalized environment, subsidies tend to displace rather than complement private investment

- **New Models for Universal Access**
 - Explore new approaches, such as Open Access and PPPs
 - Adapt OBA approach to deployment of mobile telephony networks and broadband Internet (backbones and access)
 - Explore approaches to promote development of content
- **Take advantage of Convergence**
 - Existing regulatory model is rendered obsolete, but decoupling of networks and service allows for increased competition and lower costs
 - Wireless technologies broaden the options (WiFi, WiMAX, GSM450)
 - Small-scale local operators become feasible alternatives
 - Growing importance of content over networks

- Applicability of RBF approach to different levels of sector reform
- Potential use as “carrot” for sector reforms
- Applicability of approach to more advanced services, e.g. broadband
- Choice of Bank instrument: TA, SIL, RBF
- Procurement issues: no common approach for OBA and PPPs throughout 6 regions
- Disbursement issues: relatively short length of Bank projects makes “pure OBA” difficult to implement



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THANK YOU!

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