1. Key development issues and rationale for Bank involvement

The isolation and high cost structure of Central Africa economies have held back is compounded by the limited availability of affordable telecommunications infrastructure. Some Central African countries have started to take steps to reduce the cost of access domestically through market liberalization and policy/regulatory reform. However, due to incomplete liberalization and lack of infrastructure, cost for ICT and telecommunications services have remained high. Without access to low price and high quality of telecommunications services, it is very costly for countries to trade between themselves and with the rest of the world (opportunities to create jobs, expand production of goods and services are limited).

At the policy, legal and institutional levels for the ten (10) countries covered by this Program (CEMAC Countries\(^1\) plus DRC, Nigeria, Sao Tome and Principe, Sudan), most countries have updated or are in the process to finalize new sector policies (i.e. Cameroon and CAR in 2006, Chad in 2007), seven (7) countries have established separate regulatory authorities, eight (8) countries have two or more mobile operators, six (6) countries have partially privatized their incumbent telecom operator.

\(^1\) The “Communauté Economique et Monétaire de l’Afrique Centrale” (CEMAC) includes Cameroon, CAR, Chad, Congo, Equatorial Guinea and Gabon.
For the ten countries covered by the CAB Program, in terms of access and price:

- Fixed teledensity is well below the Sub-Saharan Africa (SSA) average (0.77 VS. 1.77 lines per 100 people in 2005)
- Mobile teledensity is also below SSA average (10.2 VS. 12.5 lines per 100 people in 2005)
- Average Internet dial-up (low bandwidth) access cost per month in 2005 is USD65 for the targeted country group, USD72 for the CEMAC compared to USD45 in SSA and USD22 in the World
- International Bandwidth tariffs are more than USD10,000 per Mbits per month for landlocked countries (i.e. Chad and CAR using exclusively satellites) while volume buyers in very well-connected countries (using international fiber-optic backbones) like South Africa could buy international bandwidth at about USD1000 per Mbits per month.

There is considerable interest among governments in the region to address the existing sector constraint and develop an efficient Central Africa telecommunications market as key to promoting regional integration, economic growth and development of member states. Some studies have been undertaken in the region to assess options for infrastructure sharing among countries, and relative costs/benefits of terrestrial and satellite backbone infrastructure.

A feasibility study on the Central Africa Backbone (CAB) financed by PPIAF and managed by the World Bank was carried out from August 2006 to March 2007. The Study confirmed the feasibility the CAB Program and recommended the implementation of CAB Phase 1 involving Cameroon, CAR and Chad (but also links to Nigeria and the Sudanese border). The impact on International Capacity tariff fluctuates between -30% to -60% for landlocked countries (Chad and CAR) depending of the scenario).

Several institutional arrangements for CAB have been established including: the Inter-Ministerial Committee, the Expert Commission, and National Technical Committees. Several meetings have been organized to finalize scope of preparatory consultancies to be launched in Q1 2008.

In May 2007, the CEMAC Heads of States adopted a resolution calling for the establishment of the Backbone and asking Donors to provide financing for the CAB implementation. In line with the Regional Integration Assistance Strategy (RIAS) and national CAS/PRSP, the World Bank responded positively. For the CAB Phase 1 (Basic configuration – Cameroon, CAR and Chad), the project will benefit from IDA Regional and National funds for an estimated total amount up to $45m. It is thought to mobilize at least USD20m funding from the private sector (PPP) for Phase 1 and additional funding from other Donors.

Other countries with limited availability of affordable telecommunications infrastructure have already expressed interest in the CAB Program and will be included in the overall Program (i.e. other CEMAC countries – Congo, Equatorial Guinea, Gabon, and DRC -, Nigeria, Niger, Sao Tome y Principe and Sudan).

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2 The proposed operation involves three counties (Cameroon, CAR and Chad) in Phase 1 (for an estimated total IDA amount of USD45m), and up to eight other countries likely to join in subsequent phases – Phases 2 and 3 (for a total amount of USD160m).
2. Proposed objective(s)

The development objective of the Central Africa Backbone (CAB) Program and CAB 1, 2 and 3 Projects is to support population, businesses and governments across the Central Africa region to have access to quality and affordable ICT services on open, transparent and non-discriminatory terms. The benefits accrued in the targeted countries spill over the Central Africa region by: (i) lower cost of international broadband capacity and extend reach of backbone networks across the region and (ii) improve Government efficiency and transparency through eGovernment applications; and (iii) increase country and regional competitiveness.

3. Preliminary description

To maximize flexibility, client-responsiveness and the specific national situation of each country (in terms of existing infrastructure or policy environment), the CAB Program will include a customizable components and sub-components drawn from the following focused areas:

Component 1 - Enabling environment at the regional and national levels
- Modernize and harmonize legal and regulatory framework the Information Communication Technology (ICT) sector and the Information Society
- Strengthen capacity of public key stakeholders (i.e. Ministry and independent regulatory agency)
- Promote a pro-competitive environment (i.e. develop regulatory tools, liberalize the telecom sector, restructure and privatize public incumbent operators, PPP promotion) to maximize benefit from the regional backbone
- Strengthen M&E capacity

Component 2 - Connectivity
- Finance the national infrastructure for the CAB including fiber-optic cables, terminal equipments, switches, to guarantee the establishment of an open access networks (to all operators) on the basis of PPPs, leveraging private sector investment
- Finance the purchase of capacity on the CAB to assist rural and underserved areas, as well as targeted users (schools, universities, hospitals eGovernment use) with discounted capacity prices
- Finance the establishment of government Virtual Private Networks (VPNs) to collect all the government communication needs (voice and data) to be routed via the CAB and the establishment of national and regional Internet Exchange Point (IXP)
- Support to extend ICT in rural areas on the basis of PPPs with competitive award of subsidies (including country-specific innovative demand stimulation programs such as Digital Villages and the SMS eService programs)

Component 3 - Good Governance and Transparency - Flagship IT applications
- Deploy flagship applications for which country champion and commitment have been identified to improve internal systems, deliver services more efficiently and
effectively, and make information & services more accessible to the population. Applications that could be targeted are: customs systems, income taxes, social security benefits, personal documents (passport, driving license), car registration, building license, birth and marriage certificates, electronic payment (for utilities). The applications will be prioritized as follow: (i) activities that will have the greatest impact in terms of transparency and accountability; (ii) activity for which a champion and commitment has been identified; (iii) involvement of local communities, NGOs or local units of international agencies; (iv) possibility of private sector participation; (v) high potential of success with implementation and payback within a few years.

All these components and sub-components will contribute to ensure the viability of the CAB. For instance, without the potential increased traffic made possible by an acceleration of national infrastructure roll-out and application building, the regional infrastructure may not be viable and therefore may not materialize. Conversely, without the CAB linking all countries within the Central Africa region, the individual countries may not be in a position to achieve low-cost broadband access and therefore may not be in a position to advance their growth agenda and overall global competitiveness. Landlocked countries in Central Africa are especially disadvantaged as they need to interconnect with incumbents or national long distance operators in intermediary countries to carry traffic to the landing point and often pay high prices in the process. Effective cross-border links and supporting regulatory frameworks are therefore critical for the region as a whole.

**Lending Instrument**

The lending instrument will be a Regional IDA horizontal Adaptable Program Loan (APL)\(^3\). The proposed operation involves three counties (Cameroon, CAR and Chad) in Phase 1 (for an estimated total IDA amount of USD45m), and up to eight other countries likely to join in subsequent phases (for a total amount of USD160m).

The proposed APL structure will allow countries to join on a commitment and/or readiness basis. The World Bank will provide resources alongside other development partners.

Four main preparatory studies (consultancies) have been identified – finance, technical, legal and environment -, agreed with all stakeholders and will be launched prior CAB Phase 1 project appraisal. Grants funds are currently mobilized (PPF(s) may be set-up in Q1 2008, if necessary). Other technical studies will be launched in 2008 to confirm readiness of other CAB eligible countries for CAB Program financing (i.e. DRC)\(^4\).

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\(^3\) A horizontal Adaptable Program Loan (APL) is structured in “horizontal” phases in order to allow participation of different countries as and when they express demand and demonstrate readiness.

\(^4\) Subsequent phases will reach Board based on readiness of countries applying for support under the Program as well as availability of IDA/IBRD financing.
4. Safeguard policies that might apply

The physical component of the CAB Program will be limited to the building of national terrestrial backbones and the deployment of rural networks (land acquisition for the construction of telecommunications and ancillary infrastructure, such as ducts for laying fiber optic networks or access roads). The fiber optic infrastructure laid along the oil pipeline between Kribi (Cameroon) and Doba (Chad) is already in place (no civil work is expected next to the oil pipeline). The CAB Phase I will deploy infrastructure from the installed fiber optic backbone next to the oil pipeline to the capital cities of Chad and CAR.

ASPEN Review confirmed the project as category B (OP 4.12 is triggered; OP4.04 and 4.11 are to be determined).

An Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) will be conducted for the CAB program prior to Project appraisal. The ESMF and RPF will be reviewed by the World Bank and publicly disclosed in all countries participating in CAB Phase I. Specific Environmental Management Plans and Resettlement Action Plans will be prepared as necessary for terrestrial facilities during project implementation, in line with ESMF and RPF, once the locations of those facilities have been identified. An Environment Assessment (EA) will be carried out for the activities already identified and the Resettlement Assessment Plan will be determined based on the technical feasibility and/or EA study. And if needed, it will be prepared and disclosed as well.

Civil works for the first 12-18 month of project implementation should be screened for environmental and social impacts and EAs / EMPs needed for those sites should be ready for disclosure (along with the draft ESMF) before appraisal.

Finally, since the Program will involve PPP schemes, appropriate technical clauses will be prepared and included in the biddings/bindings documents for the Private Entity when necessary, to ensure the execution of agreed environmental and social safeguards measures or instruments.

All safeguards instruments prepared for the project will be disclosed 120 before Board presentation.

5. Tentative financing

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6. Contact point

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