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Interconnecting Africa: the EU-Africa Partnership on Infrastructure

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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Interconnecting Africa: the EU-Africa Partnership on Infrastructure

When setting out its strategy for Africa the European Council concluded that rapid, sustained and broad-based growth is essential for development and for fighting poverty[1]. One of the main measures underpinning the Council's strategy is creation of the EU-Africa Partnership on Infrastructure. The Partnership, a joint EU effort, responds to the development goals of the African Union and its New Partnership for Africa's Development (NEPAD). It aims to substantially increase EU investment in African infrastructure and delivery of transport, energy, water and ICT services. Improving infrastructure, the related services and the regulatory framework will contribute to sustainable economic growth, promote competitive trade, create employment and decent work, foster regional integration and reduce poverty. Achieving these objectives depends also on sustained efforts for improving peace and security, and governance in Africa.

1. MEETING THE CHALLENGES OF INFRASTRUCTURE FOR ACCELERATING AFRICA'S DEVELOPMENT

European and African research shows that tackling the challenges of infrastructure and the related services can effectively contribute to attaining and sustaining the 7% growth rates necessary for achieving the MDGs[2]. The Partnership is designed to meet these challenges.

1.1. The development challenges

Stimulating sustainable economic growth: getting Africa to invest in Africa and attracting foreign direct investment depends largely on reliable infrastructure and the services it delivers. This calls for a stable, secure and well governed economic environment. According to some estimates, a one percent increase in the infrastructure stock could add one percent to GDP growth[3].

Promoting competitive trade: Africa needs an efficient transport and communications system to get its goods to national, regional and international markets. Moving goods in Africa is more difficult and costs almost twice as much as in other developing regions, especially so in landlocked countries. Improvements in policy and regulatory reform in trade, transport and ICT, capacity building and physical infrastructure have the potential to significantly reduce transport costs and increase transport.

Fostering regional integration: Africa needs to expand its trade. This demands a commitment to integration within coherent regional trade agreements and harmonisation of

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1 European Council: The EU and Africa: Towards a Strategic Partnership – 15961/05 (Press 367) of 19.12.2005

2 DAC Network on Poverty Reduction: Guiding principles on using infrastructure to reduce poverty, December 2005

3 Can Africa Claim the 21st Century, World Bank, April 2000

infrastructure policies and regulatory frameworks. Good communication and use of e-technologies can accelerate the process.

Contributing effectively to the MDGs: today over 300 million people – some 42% of Africa's population - still have no access to safe water. Similarly access to basic sanitation is denied to 60% of the population. Less than 20% of Africa's population has access to electricity, and power rationing and cuts are part of the daily routine. This inhibits job creation and industrial investment and impedes production of competitive goods and services. Access to affordable water and modern energy services, sanitation and improved hygiene are essential to achieve all the MDGs.

1.2. Africa's ongoing struggle

During the 1990s many African countries adopted new infrastructure policies, leading to major institutional and financial reforms to deliver sustainable infrastructure. Although progress has been made, much more has to be done, including improving governance and regional integration.

Transport systems, although weak, are slowly improving: road transport accounts for 90% of interurban transport but physical links and services are inadequate. Rail network coverage is sparse and interconnectivity of networks is low. Many seaports struggle to offer competitive services and inland waterways are poorly integrated into transport networks. Air transport has not fully benefited from the adoption of the Yamoussoukro Decision in 1999. Road conditions are improving where the practices advocated by the Sub-Saharan African Transport Policy Programme (SSATP) are being implemented. Railway and port efficiency are showing improvement where provision of services is concessioned to the private sector. Yet transport costs remain high, much higher than in other developing regions, averaging 14% of the value of all exports compared with 8.6% for all developing countries, and higher still for many landlocked countries – Malawi (56%), Chad (52%) and Rwanda (48%)[4].

Energy potential in abundance but inefficiently used: most fossil fuel is exported. Renewable resources are barely used or used on a sustainable basis and only 7% of Africa's hydropower potential is converted into electricity. Energy pooling and interconnectivity are addressing the problem of unreliable and costly services. Increased national and cross-border energy cooperation and trade is essential for improving reliability, affordability and access.

Water resources are unevenly distributed and erratic rainfall exacerbates equitable access: many African countries suffer large seasonal rainfall fluctuations and periodic cycles of drought and flood constraining food production, ecosystem protection and economic development, particularly among the poor. Transboundary river basins need joint management for conservation and equitable resource-sharing – a priority of the African Ministerial Council on Water in its efforts to deliver the African Water Vision for 2025. Improving the affordability of and access to water services at country level needs a stable and secure financial and governance environment.

Africa's communication technology is catching up rapidly although access to services is patchy: fixed line telephone connectivity, the lowest world-wide, is steadily increasing but

[4] Assessing Regional Integration in Africa, Economic Commission for Africa, 2004

was overtaken by the dramatic growth in mobile telephone services[5]. Rural access still lags far behind urban access. The digital divide, the widest word-wide, is slowly narrowing as RECs and countries harmonise policies and communication regulations, but insufficient regulatory reform could make African telecommunications services the most expensive in the world.

1.3. Africa needs to invest more in infrastructure

African governments and development partners sharply reduced the share of resources allocated to infrastructure during the 1990s. Government expenditure has fallen far below the 4% of GDP necessary to maintain and operate its infrastructure, let alone the additional investment, 5% of GDP, needed to develop it. This means Africa needs an additional US$ 20 billion a year to sustain a growth of 7%.

EU Member States' support for economic infrastructure and services has declined over the last decade, mainly in transport and partly in energy. As a share of total ODA, commitments dropped from 19% over the period 1985-94 to 11% in 1995-2004[6]. Over the past decade the EC has maintained the level of financial support to transport in Sub Saharan Africa. Currently it stands at €2 500 million under the 9th EDF. After the World Summit on Sustainable Development in 2002, water funding rose from €475 million to €975 million and energy funding to €230 million as a result of the Water and Energy Facilities. EC (EDF) aid allocation to infrastructure in Sub Saharan Africa adds up to €3 750 million, 25% of the 9th EDF. EC budget aid to infrastructure for North Africa adds up to €382.9 million over the period 2003-2005 (see table in annex).

Future allocations to both sub-regions of Africa from the EDF and EU budget will be subject to programming at a later stage within their respective financial frameworks.

1.4. Increasing investment demands better systems and institutions to sustain them

1.4.1. Lessons from experience

Recent evaluations in the sectors covered by this Communication indicate that the EC's policy and strategy played an important role towards improving maintenance, which has been an essential component of the EC's sectoral approach. Yet, more needs to be done to secure sustainability. Improving the primary road network and maritime ports had a positive impact on trade development and on regional economic integration. Increasing access to basic water and sanitation has improved people's livelihoods. All lessons learnt confirm the EC's policy on a sector-wide approach. This is where the Commission's coordination with African governments and other donors has led to significant progress, which will continue. An evaluation on energy is underway.

1.4.2 Looking ahead

African economies will only benefit if the services delivered by improved infrastructure can be sustained. Many African countries are tackling the issues of sustainability – macro-economic affordability, secure and sufficient finance for maintenance, "commercially" managed institutions and entities staffed by skilled and sufficient personnel, reliable data

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5 COM(2006) 181 Towards a Global Partnership in the Information Society: Follow-up to the Tunis Phase of the World Summit on the Information Society"

6 Donor Atlas 2006, European Commission-OECD

backed by research, better customs and trade facilitation, mitigation of environmental impact and enforcement of regulatory frameworks. There is still much to be done.

Creating sound institutional and financial frameworks takes a long time. Few countries have infrastructure sectors that are sufficiently robust to survive without external support. Regional sustainability is impossible without strong country frameworks. These are essential if African economies are to reap the benefit of rigorous implementation of regional protocols and agreements on transport, energy, water and ICT.

2. AFRICA'S CONTINENTAL AND REGIONAL VISION

The Heads of State of the African Union (AU) have identified peace, security and good governance as essential if development is to succeed. If Africa is to make real progress towards achieving the MDGs a continental vision is necessary. The creation of NEPAD has come at a critical time in Africa's development.

2.1. African Union – a privileged partner

The rapidly developing AU is a privileged partner for the EU. With its continent-wide political mandate, the AU facilitates dialogue with and between RECs, an increasingly important factor for interconnecting Africa. The AU ensures African ownership, steers overall policy and ensures the continental integrity of the Partnership.

2.2. NEPAD – Infrastructure Short-Term Action Plan (i-STAP)

In May 2002 the AU published NEPAD i-STAP which advocates that bridging the infrastructure gap is the key to interconnectivity, regional integration and economic growth. i-STAP sets objectives for infrastructure sectors linked to the overarching goal of poverty reduction. It addresses the sectoral challenges and identifies responses in four areas: (i) facilitation – policy and regulatory frameworks, (ii) capacity building, (iii) capital investment and (iv) studies for new projects. i-STAP has stimulated extensive AU-NEPAD/donor dialogue and donors, including the EC and EU Member States, have been involved in updating it. It brings new vigour, speeding up implementation of tested policies and good practice.

2.3. Achieving NEPAD's infrastructure goals means doing things differently

Firstly, it means much more money for infrastructure to contribute effectively to sustainable economic growth. Between 2005 and 2015 Sub Saharan Africa needs to spend approximately 5% of its GDP on infrastructure investment and a further 4% on operations and maintenance - additional expenditure of US$ 20 billion per year. Secondly, it calls for renewed African ownership and leadership in the process of setting priorities, making progress on regional integration, sound institutional and economic governance and transparent procurement. Thirdly, donors must develop delivery mechanisms that leverage public and private sources of finance. Fourthly, all parties must live up to their commitments in the Paris Declaration[7]. Fifthly, stronger involvement by the private sector is necessary (the EC is organising a Business Forum in November 2006). The Partnership is designed to achieve these goals.

[7] Paris Declaration on Aid Effectiveness, February 2005

3. THE EUROPEAN UNION INITIATIVE: THE EU-AFRICA PARTNERSHIP ON INFRASTRUCTURE

The Partnership, based on the EU Strategy for Africa, is the EU's response to Africa's NEPAD Infrastructure Action Plan. It provides a framework for enhancing coherence between the action taken by the EC and EU Member States and for channelling, in a coordinated way, their efforts to scale up aid to Africa.

3.1. Objectives

The Partnership aims to support programmes that facilitate interconnectivity at continental and regional level. The Partnership operations will also supplement the EU's sectoral approach to infrastructure at country level (box 1) and help to implement the Economic Partnership Agreements (EPAs). These approaches will ensure that investments at continental and regional level are coherent with national poverty reduction and infrastructure strategies. Such complementarity will increase the sustainability of operations at regional and country levels. The annex provides brief sector reviews and maps showing the trans-African transport corridors and electricity interconnections, river basins and ICT networks that will shape the Partnership operations.

3.2. Scope

The main focus of the Partnership is the infrastructure that secures interconnectivity across the continent and its different regions. It will encompass trans-boundary, regional and national infrastructure in the widest sense: transport networks, water and energy infrastructure and connections as well as ICT networks.

The Partnership will also tackle service delivery issues that are essential for removing obstacles to intra- and inter-regional trade, thereby seizing the opportunities created by liberalisation of services and customs reforms. Partnership programmes will be a mix of physical infrastructure investment, institutional development and capacity building, plus support for the policy, facilitation and regulatory frameworks essential for efficient infrastructure operation and service delivery. EU and international guidelines will be followed for carrying out in-depth social and environmental impact assessments. Best practice will be used to mitigate potentially negative environmental and social impacts and to promote and reinforce positive impacts.

Box 1: Infrastructure - sectoral objectives

Transport – reduce the cost and improve the quality of services, by removing infrastructure barriers and non-physical barriers to free movement of goods and people, strengthening customs operations, improving maintenance of transport assets, etc. with the following themes: trade corridors without borders and barriers; better and safer roads; competitive rail services; efficient ports including modern fisheries infrastructure and services meeting appropriate sanitary requirements, and safe seas and ports; and safe, secure and efficient skies and airports.

Water and sanitation – sustainable use of available finite water resources to meet the population's basic water and sanitation needs and improve integrated water resources management at local, river basin/catchments, national and transboundary levels.

Energy – fully develop access to sustainable and **affordable energy services** for economic and social sectors, improve policy frameworks and institutional capacity, and facilitate investments essential for

generation, cross-border interconnections, grid extension and rural distribution.

Information and Communication Technologies – bridging the digital divide by providing adequate access to affordable ICTs through support for regulatory reform and capacity-building and developing pan-African broadband infrastructure and non-commercial e-services linked to regional and national networks.

3.3. Europe brings expertise and experience from its trans-European networks

The EU has extensive expertise to share with Africa from its experience of the trans-European networks (TENs) for transport, energy and telecommunications. This is leading to large-scale regional and interconnectivity infrastructure that complements country sectoral objectives for achieving economic growth and integration. The EU has developed principles (see annex) that (i) deliver a rigorous and clear methodology for identifying major trans-national axes and priority projects and (ii) build consensus between countries and stakeholders on the harmonisation of regulatory frameworks. Such knowledge will enrich the AU-EU dialogue.

4. THE PARTNERSHIP IN PRACTICE

The Partnership draws together a wide range of institutions and stakeholders and demands efficient interaction at continental, regional and country level. The RECs have their own constituencies that are geographically widely scattered and comprise countries at different levels of development. Some countries are members of two and, in a few cases, three different RECs. This multiple membership adds to the complexity of the Partnership operations.

4.1. Institutional operations

As the Partnership operates at three levels – continental, regional and national – the subsidiarity rule should apply within an overall framework that provides the minimum coordination required for efficient and effective operations.

4.1.1. Continental level

AU-NEPAD periodically reviews and updates i-STAP and coordinates identification of the continental and regional priorities of the Partnership. These priorities will take account of the RECs' programmes and country operations that support the Partnership as well as any adaptation of the EU-TEN principles. AU-NEPAD and the EC (headquarters and the EU Delegation in Ethiopia) will share information and findings with EU Member States and the Infrastructure Consortium for Africa.

4.1.2 Regional level

Regional cooperation between the EC and the RECs is well-established under the Cotonou Partnership Agreement. It includes the creation of EPAs aimed at building regional markets and facilitating trade between and within regions plus external trade with partners beyond Africa. To ensure that the Partnership and Regional Strategies are both coherent and complementary, the Regional Indicative Programmes (RIPs) should envisage support for policy and regulatory frameworks that increase the sustainability of physical investments by the Partnership. AU-NEPAD and the EC (headquarters and the EU's regional Delegations) will monitor investments that strengthen regional networks and systems.

Regional cooperation between the EU (including outermost regions, especially Canary and Reunion Islands, Madeira), North African countries and their Mediterranean neighbours takes place under several cooperation frameworks. These include the Euro-Mediterranean Partnership, the European Neighbourhood Policy its Action Plans, Horizon 2020 Initiative and the Mediterranean component of the EU Water Initiative. Access to funding under these frameworks, within their relevant geographic limits, can support the Partnership interventions.

4.1.3. Country level

Development cooperation at country level underpins the success and sustainability of the Partnership at regional and continental levels. Cooperation between the EC and individual SSA countries is well-established under "Cotonou". Similarly, the EC's Neighbourhood Policy and associated agreements govern cooperation with North African countries. The EC and the EU Member States have agreed to move towards joint multi-annual programmes based on partner country development strategies[8]. The process includes consultation with the private sector and civil society, which could provide opportunities for private-sector financing in the Partnership. Thus the National Indicative Programme (NIP) financed by EDF or EU budgetary resources is set within a common country strategy.

To ensure that the Partnership and country strategies are both coherent and complementary, country programmes should include support for sector policies and measures that increase the sustainability of the Partnership operations. AU-NEPAD will work closely with the EU and its country Delegations in monitoring country action that directly contributes to the Partnership's objectives.

4.2. Implementation instruments

The EU Member States have committed themselves to raise their ODA to 0.56% of GNI by 2010, with half of the additional €20 billion a year going to Africa. Member States have also committed themselves to improve aid effectiveness – ownership, harmonisation, alignment on country systems and results orientation. Delivering on these commitments demands a coherent, coordinated and collective EU effort. By developing a global vision the Partnership provides a framework to increase aid to infrastructure and to deliver results effectively. Several ways for the EU to work together are described below.

4.2.1. EDF programmable resources

Regional and national resources: if the current level of financing under the 9th EDF is maintained in the 10th EDF allocations to infrastructure could increase from €3 750 million to approximately €5 600 million, a substantial proportion of which will finance the Partnership operations.

Intra-ACP resources: in addition to the financing mobilised from the Water and Energy Facilities in support of the Partnership, an allocation of approximately €600 million, which will be channelled as follows:

[8] Council conclusions on Financing for Development and Aid Effectiveness; delivering more, better and faster – GAERC – 11 April 2006, Luxembourg

- a substantial part to the Trust Fund for capital investment projects proposed by project promoters for financing by means of a mix of grants and loans. These grants will be allocated in accordance with the Trust Fund modalities,

- part for grant-to-grant financing for (i) capacity-building and support for regional initiatives and facilitation programmes and (ii) support for sections of the African networks, particularly for roads and water, which, by nature, are not suitable for loan financing,

- start-up grant support for those networks and the related services or parts thereof that qualify as trans-African to leverage additional financing from other parties.

4.2.2. The EU Infrastructure Trust Fund for Africa

The Trust Fund is a collective EU response and an innovative way to co-finance (see Impact Assessment) along with the EIB and European and African development financing institutions (DFIs). The grant income of the Trust Fund will be provided by the EC and any EU Member State willing to contribute. Trust Fund grants are envisaged to cover (i) interest-rate subsidies, (ii) co-financing with the EIB, DFIs and AfDB, (iii) risk guarantee mechanisms not already covered by existing instruments and (iv) grants for project preparation and capacity-building. Thus EU grants will attract and leverage additional ODA loans and non-ODA finance.

The principles of ownership and management of the Trust Fund are built upon a "light" structure:

- a Steering Committee consisting of AU-NEPAD, the European Commission, the EIB, donors and African actors to secure African ownership, provide overall policy guidance and set priorities,

- an Executive Management Committee of "contributing donors" to appraise and approve projects,

- a Partnership secretariat, headed by the Trust Fund Manager, to support the Steering and Executive Committees.

The modalities governing operation of the Trust Fund will be agreed by the founding members. The EIB will be responsible for administering the revenue and expenditure of the Trust Fund.

The Trust Fund will receive €60 million from intra-ACP resources and the EIB is planning loans of between €220 and €260 million for the period 2006-07.

4.2.3. Reinforced coordination and co-financing

The abovementioned EC-driven financing instruments alone will not be sufficient. They should be supplemented by other ways of working together, by stepping up the pace towards closer coordination and expanding joint co-financing, pool funding and parallel financing opportunities.

4.3. The operations

In line with the AU-NEPAD i-STAP, the Partnership operations will fall into two broad categories: (i) facilitation and studies - the software and (ii) physical investment - the hardware

4.3.1. At continental and regional level

The Partnership will support:

- planning and prioritisation of infrastructure investments that establish regional and continental master plans for transport, energy and ICT networks and river basin organisations,

- infrastructure activities that reap the benefits from trading opportunities opened up by EPAs, build on EPA implementation and exploit the opportunities from liberalisation of services and customs reform,

- capacity building in continental and regional African institutions and research bodies (complementing support provided by the RIPs and the 7th RTD Framework Programme) - AU, AMCOW, Ministerial bodies on energy, SSATP, regional and continental regulatory authorities, civil aviation authorities, regional power pools, etc.,

- harmonisation and implementation of international and regional agreements, regulations and standards for all modes of transport, energy, water and ICT,

- regional regulatory reform to encourage private investment from domestic and foreign resources for the efficient provision of infrastructure and services,

- measures for improving air (e.g. by supporting COSCAP projects) and maritime safety and security and environmental protection and extension of European satellite navigation services (GALILEO) and of the EU Air traffic management modernisation programme (SESAR) and the Single European Sky initiative,

- free, safe and secure movement of transit traffic along Africa's corridors and across borders,

- preparatory activities for essential investment and finance studies for regional and continental Partnership projects,

- provision of missing links and cross-border infrastructure in trans-African transport, energy and ICT corridors and networks (based on open-access principles),

- sustainable and equitable management of water basin and transboundary resources.

4.3.2. At country level

The Partnership will:

- increase the efficiency of national legislative and regulatory frameworks and support the integration and implementation of international and regional agreements into these frameworks,

- finance studies on, and investments in, transport (including measures to reach international safety and security standards) energy and ICT projects of national relevance that form part of the trans-African corridors and networks,

- ensure that the sustainability of the trans-African corridors and networks is taken into account in the country programmes,

- capitalise on links with the EU Energy Initiative to facilitate access to modern and affordable energy services by more efficient use of resources, grid extensions and wider use of renewables, as well as links with the Renewable Energy and Efficiency Partnership and the Johannesburg Renewable Energy Coalition,

- capitalise on links with the EU Water Initiative to secure access to water supply and sanitation within a framework of sustainable and integrated management of water resources.

4.4. Coordination with EU Member States, other international bodies and initiatives

The success of the Partnership demands effective coordination, led by AU-NEPAD, between the EC and EU Member States and all other players.

4.4.1. Coordination with EU Member States

The EC will lead coordination of EU support based on the well-established coordination groups that exist at sectoral level and existing coordination mechanisms at country and regional levels.

4.4.2. Coordination with other international initiatives and bodies

Coordination between the EU, the EIB, and the World Bank, the leaders in financing infrastructure, is well-developed; good progress is being made with the AfDB. Likewise, the EC will continue its cooperation with the International Civil Aviation Organisation (ICAO) and the International Telecommunications Union (ITU).

Coordination with the Infrastructure Consortium for Africa, an advocacy forum that does not finance infrastructure but seeks to scale up investment in infrastructure, is facilitated by EU membership. The EC brings to the Consortium a strong EU voice and a common vision and strategy.

4.5. A strategy for a sustainable Partnership

EC experience and the lessons learnt from evaluations emphasise that beneficiary ownership and sector sustainability remain the keys to sustainable infrastructure. Without timely and adequate maintenance of infrastructure networks the services that users and beneficiaries demand will not be sustainably delivered. The Partnership will:

- seek government commitment at political level to implement good governance in all infrastructure sectors,

- support sector-wide approaches at country level that integrate infrastructure and the related services,

- build coherence between country, regional and continental activities within the Partnership,

- promote private sector participation, where appropriate, through private-public partnerships,

- support infrastructure that is safe, appropriate, responds to the needs of men and women, and respects the outcomes of social and environmental impact assessments.

In developing the Partnership, the EC proposes to facilitate a series of events with the African Union, RECs, EU Member States and international development partners to put the Partnership into operation. These will include:

- a high-level continental meeting in Africa to launch the Partnership,

- a series of high-level and sectoral meetings at regional level to help to identify Partnership operations.

In general, the Commission will continue its dialogue with African partners and European stakeholders at all levels in formulating Partnership priorities, its operations and their implementation.

ANNEX

Sectoral overview, methodology and maps of the trans-African transport corridors, the continental electricity interconnections and river basins and ICT networks

This annex gives a brief overview of each sector - transport, energy, water and ICT. It also outlines the basis for a dialogue between the EU and the AU for moving the Partnership forward and delivering what Africa expects from its infrastructure and services. To facilitate the dialogue between stakeholders, maps of continental and regional transport, energy and ICT networks and of river basins are included. The maps are based on AU-NEPAD strategies and reflect the current progress on the dialogue; they should be regarded as indicative.

A methodology for prioritising EU operations

To guide the decision-making process on setting priorities for EU operations within the EU-Africa Partnership, a two-stage process is summarised below. The process is adapted from the methodology used for extending the trans-European networks. It will be further developed in the course of the ongoing EU-AU dialogue to reflect the AU-NEPAD criteria and will be used as a framework for reaching a consensus between stakeholders.

The first stage is to identify the major trans-African corridors and networks connecting countries, which are most relevant to international exchanges and traffic and to strengthening regional integration and continental cohesion. Various criteria will be jointly agreed under two main categories – institutional and functional.

The second stage is to prioritise projects on the selected trans-African corridors and networks. This process will cover a full project appraisal, which will include, inter alia:

- a firm commitment by the region, country or countries and entities concerned to implement the project, including a clear demonstration of the benefits of the project and how it responds to different demands, a realistic and affordable financing plan and an implementation timetable,

- an analysis of the benefits of the project in terms of its economic and financial, institutional, environmental and social impact. These analyses will take account of the ways in which projects contribute to economic efficiency, environmental sustainability, improved safety and security, etc.

Partnership operations to improve infrastructure along trans-African corridors and networks alone are not enough. These operations need to be supplemented by “facilitation measures” that ensure efficient movement of traffic along corridors and networks and minimum delays at borders. Such measures include, inter alia, harmonisation of transit transport and trade regulations and procedures, technical and administrative interoperability, implementation of new technologies, such as traffic management and electricity grid systems, and measures to improve safety and security. The EU operations will include a balance of physical investment and facilitation measures.

The EU-Africa Partnership on Infrastructure: Transport

A brief overview

Physical links in Africa fall well short of expectations and the infrastructure and services network remains under-developed. Road transport is the dominant mode, accounting for 90% of inter-urban transport.

Roads linking sub-regions are modest and road conditions vary from region to region, and within regions and countries. Road conditions are improving in many African countries where the practices advocated by the Sub-Saharan African Transport Policy Programme (SSATP)[9] are being implemented. Sustaining these road conditions demands more revenue for maintenance. Although sufficient revenue may exist in just a few countries, the current revenue of road maintenance funds covers approximately 40% of network needs. The increasing number of semi-autonomous road agencies is encouraging and makes increasing government and donor investments more sustainable. Such changes are leading to increased private sector involvement in roads. Progress over the past 10 years has been commendable, particularly given the fragile economy of many African countries. Governments must, however, redouble their efforts to increase their network maintenance.

Road maintenance remains a major problem for many African road agencies. Deferred maintenance has resulted in the loss of one third of the capital invested in the SSA road network. Maintenance budgets also remain an easy target for governments seeking savings; these are usually false economies. Deteriorating road conditions impose extra costs on road users in the form of increased vehicle operating costs or higher freight tariffs and passenger fares in the case of commercial operations. The EU has developed a sectoral approach[10] to tackle the issue of road maintenance.

Experience has defined fundamental principles for the EU's sectoral approach to sustainable road maintenance. These are:

- Involving stakeholders: as most maintenance revenue is raised from user charges, road users and beneficiaries are demanding to know where and how funds are spent. Stakeholders are increasingly involved in prioritising road maintenance in country poverty reduction strategies and sit on the boards of road funds and road agencies.

- Securing finance: road funds are proving an effective means of managing maintenance revenue, largely based on a fuel maintenance levy. Where road funds operate under "2nd generation" principles the traditional objections of fiscal earmarking tend to disappear.

- Restructuring institutions: road networks have to be managed as a business. This means defining clear responsibilities between the many road organisations, introducing effective management information, accounting and auditing systems, using the private sector for service and works delivery and paying professionals adequately. One effective way to address all these issues is to create autonomous road agencies outside the civil service.

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9 SSATP includes 32 SSA countries and the RECs. Its Long Term Development Plan (2004-07) is supported by EC (major donor), France, Denmark, Ireland, Norway, Sweden, UNECA and World Bank.

10 COM(2000) 422: Promoting sustainable transport in development cooperation

- Updating standards and regulations: ensuring that road networks cause minimum negative social and environmental impact, responding to the different needs of men and women, taking account of HIV/AIDS, improving road safety and controlling vehicle overloading call for updating and effectively enforcing standards and regulations.

Shipping is served by some 60 major ports with facilities ranging from conventional berths to container, oil and bulk cargo (see the map of the trans-African transport corridors). Many ports struggle to offer competitive services due to inadequate equipment and complex regulations. Similary, fishing ports, which could play a major role in the economic development of coastal countries, very often have inadequate facilities and services for handling local and foreign vessels and infrastructure for the storage and processing of fish products. Where the private sector is involved in concessions for container terminals and port management, port services are becoming more efficient, e.g. in Maputo, Dar es Salaam and Mombasa.

Africa is endowed with many lakes and rivers, yet few countries integrate inland waterway transport into a regional system. Exceptions are the countries surrounding Lake Victoria and Lake Tanganyika and the countries along the River Congo.

Railway coverage is sparse and where it exists density is low at 3 kilometres per 1 000 square kilometres (see the map of African railways). Africa's railways date back to the colonial period and were built to harness the mineral and agricultural resources of the continent. No regional or continental African railways network exists. Railways are expensive to construct and equip, require a higher degree of management skills and must be highly used if they are to be financially viable. Railway services are slowly being concessioned to the private sector. This is a long process involving a lengthy lead time to financial closure. It also demands considerable restructuring of the railway corporations, involving retrenchment with its consequent negative social impact. Returns to the concessionaire are only gradually emerging and should be considered a medium- and long-term prospect.

Air transport has not fully benefited from the adoption of the Yamoussoukro Decision in 1999, which pushes liberalisation of access to the region's air transport market. SADC is the most integrated region. Full implementation of the Decision is hampered by poor competition rules and protectionist measures for national airlines. Similarly, efficient air services are hindered by limited investment in airport infrastructure, which often needs modernisation if it is to meet international safety and security standards.

Overall transport infrastructure quality is slowly improving but is not always matched by simplification and harmonisation of operational issues. These include cumbersome customs and administrative procedures, illegal roadblocks, conflicting regional trade arrangements, etc. Consequently, transport costs are high, averaging 14% of the value of all exports compared with 8.6% for all developing countries, and higher still for many landlocked countries – Malawi (56%), Chad (52%) and Rwanda (48%).

A basis for dialogue: interconnecting trans-African corridors and regional networks

Reducing the cost and improving the quality of transport services is central to the transport-related part of EU development policy. This means removing infrastructure and non-physical barriers to free movement of goods, services and people, improving maintenance of transport assets, etc. and pursuing the sectoral objectives of trade corridors without borders and barriers; better and safer roads; competitive rail services; efficient ports and safe seas and

ports; and safe, secure skies and airports. And, complementary investment in communciations infastructure will lead to a more efficient flow of transit traffic along corridors and regional networks. EU programmes support these objectives and match the focus on interconnectivity at regional and continental level.

The trans-African corridors and the regional road network linking the corridors to country networks are shown on the map below. It is mainly based on work carried out by the African Development Bank in coordination with the RECs and includes information received from other donors. The continental corridors and regional networks reflect a vision of a more interconnected and better integrated Africa, which matches AU-NEPAD's aspirations.

Eight main trans-African corridors are identified, extending over a total length of 37 500 km of which 14 300 km are in poor condition or "missing links". There is also an extensive network of regional roads linking capitals, production areas, etc. that form an integral part of the trans-African corridors. Further analysis is required to establish the condition of this regional network and to prioritise its investment needs. The eight main trans-African corridors are:

Dakar–N'Djamena: The "trans-Sahelian highway" is approximately 4 500 km long and crosses seven countries: Senegal, Mali, Burkina Faso, Niger, Nigeria, Cameroon and Chad. Almost 35% of the corridor is in poor condition, especially stretches in Senegal and Mali.

The **Nouackchott–Lagos** corridor is approximately 4 500 km long and crosses all twelve coastal countries between Mauritania and Nigeria. It provides the most direct road connection between the capitals of the countries. Approximately 28% of the corridor is in poor condition.

The **Khartoum–Djibouti** corridor is approximately 1 900 km long and links Sudan and Ethiopia to the port of Djibouti. Road conditions vary from good to fair, except for two stretches of approximately 330 km in Djibouti and Ethiopia that are in poor condition.

The **Lagos–Mombasa** corridor is approximately 6 300 km long and connects the ports of West Africa (Nigeria and Cameroon) and East Africa (Mombasa), providing the landlocked Central African countries with access to the coast. Road conditions are poor along almost 53% of the corridor, especially in the Central African Republic, DRC and Uganda.

The **Cairo–Gaborone** corridor is the major trans-African corridor, approximately 8 900 km long. Road conditions vary along the corridor, with almost 33% in poor condition.

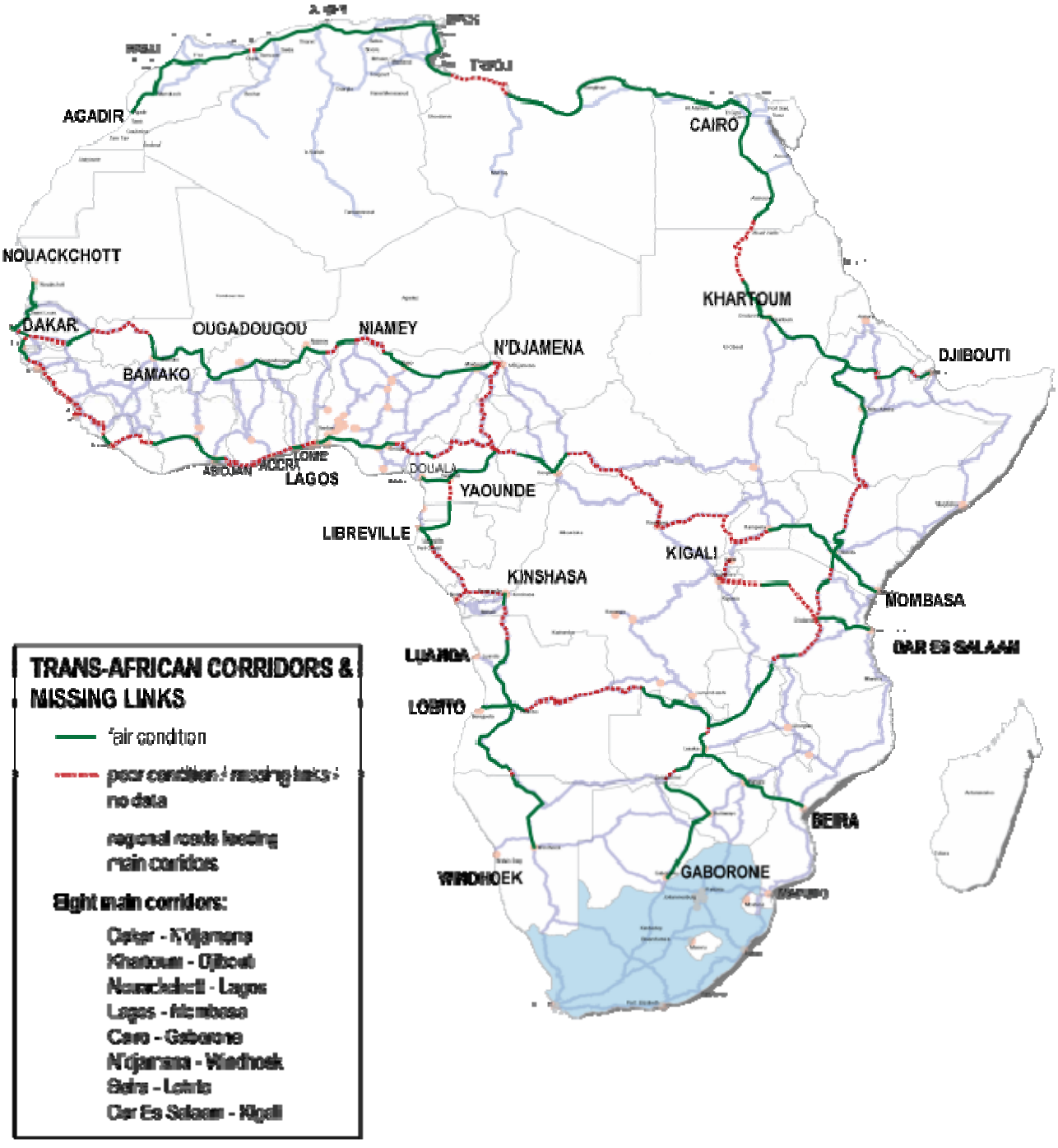
The **N'Djamena–Windhoek** corridor is approximately 6 200 km long and links seven countries (Chad, Cameroon, CAR, Congo, DR Congo, Angola and Namibia). Approximately 45% of the corridor is in poor condition.

The **Beira-Lobito** corridor is approximately 3 500 km long and connects the port of Beira with Harare and continues to Lusaka. It links four countries: Mozambique, Zimbabwe, Zambia and Angola. Approximately 45% of the corridor is in poor condition, particularly in Angola.

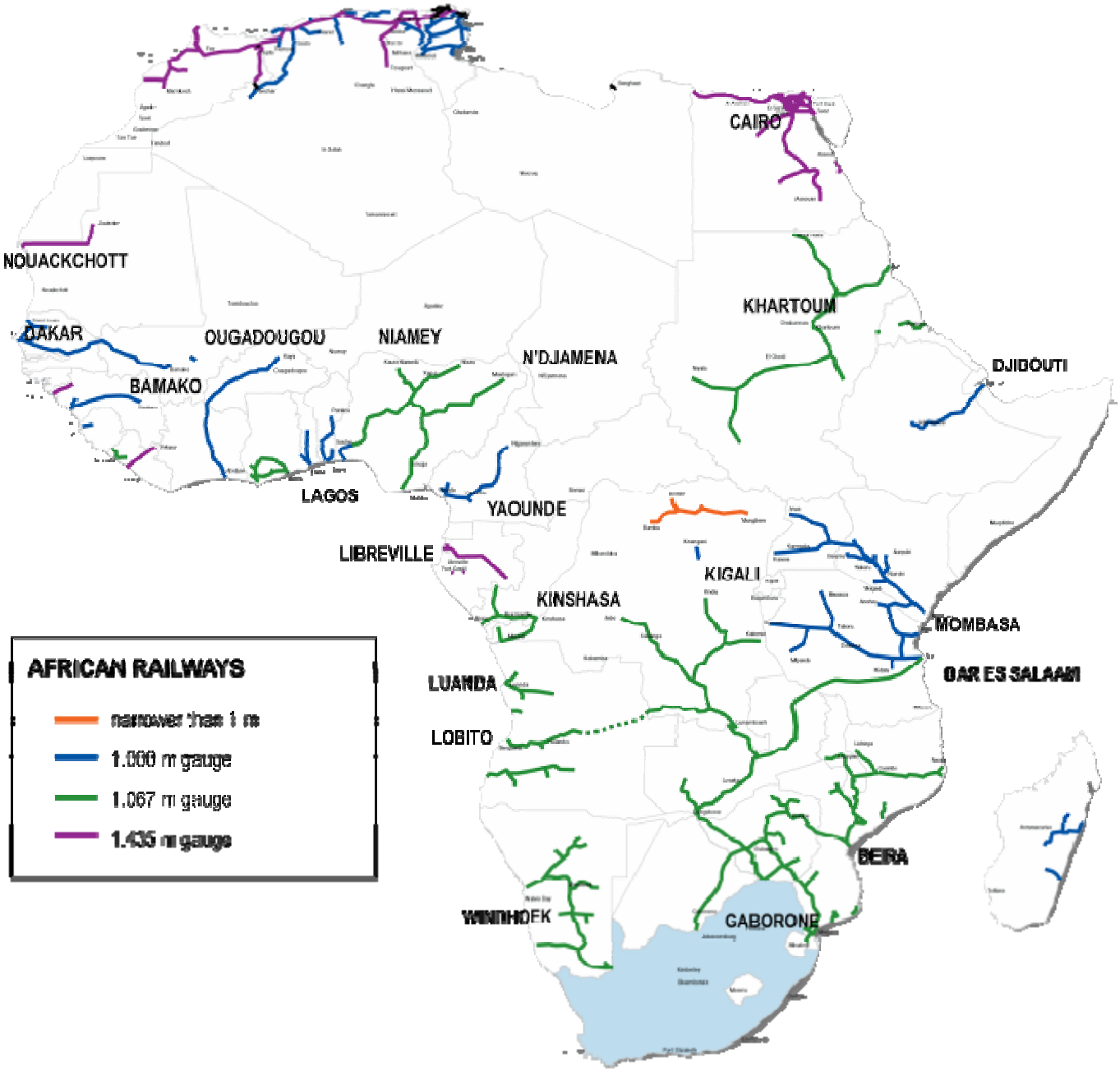
The **Dar Es Salaam–Kigali** corridor - the East-African central corridor - is 1 700 km long and connects the landlocked countries of Rwanda, Burundi and Uganda to the port of Dar Es Salaam. Road conditions vary, with about 500 km, especially in Tanzania, in poor condition.

The map does not show the well-developed corridors in South Africa nor the corridors linking South Africa to its neighbours, e.g. the Johannesburg-Maputo corridor. For North Africa, which has a better developed network, the map shows only the Cairo-Agadir corridor.

TRANS-AFRICAN ROAD TRANSPORT CORRIDORS



AFRICAN RAILWAYS



The EU-Africa Partnership on Infrastructure: Energy

A brief overview

In Africa access to modern energy services remains very low. Less than 20% of Africa's population has access to electricity and for them power rationing and cuts are part of the daily routine. This inhibits job creation, industrial investment and entrepreneurial development, and impedes production of competitive goods and services. Wider use of modern, sustainable and affordable energy services will improve the efficiency of health and education services, reduce deforestation and ease the daily burden that women bear in Africa. The EU Energy Initiative (EUEI) launched at the WSSD provides the policy framework for the EC and EU Member States to channel their efforts towards increasing access to modern energy services. The 9th EDF ACP-EU Energy Facility (€220 million) recently launched a call for proposals that will be able to co finance investments in rural energy access, to support governance and management in the energy sector and to facilitate investments in cross-border energy interconnections and cooperation. These EU operations are also complemented by actions carried out under the JREC initiative.

Africa's substantial indigenous energy resources, fossil fuels (oil, gas and coal) and renewable sources (hydro, biomass, biofuel, wind, geothermal and solar) are inefficiently used. Most fossil fuel is exported. The rising world market price of oil has a marked negative impact on the GDP of oil-importing countries, particularly the LDCs. Renewable resources are under-used and only 7% of Africa's hydropower potential is converted into electricity.

Increased national and cross-border energy cooperation and trade is essential to improve reliability, affordability and access. It is acknowledged that the traditional approach of limiting energy planning and service provision to nation states has a negative effect on development of the energy sector in Africa. Nation-based planning is sub-optimal in several respects: (a) the geography of energy supply options does not necessarily correspond to political boundaries, since the cleanest and cheapest energy source may lie across national borders; (b) national energy markets are often too small to justify the investments needed to harness certain energy supply options; (c) the difficulties involved in the delivery of energy services in remote areas due to weak planning frameworks and regulations; (d) local and cross-border energy supply often allows diversification of energy sources – a key component in energy security.

Steps are being taken to integrate regional energy systems. Progress is being made on improving power distribution through regional power pools, interconnected electricity grids and plans for regional power development. The Southern African and West African Power Pools are increasing the transit capacity for electricity interchange between the countries concerned. Central and East Africa have established their power pools. These are just the first steps, and much more needs to be done.

Similarly, the RECs are promoting cooperation on the development of gas and hydropower resources. Some cross-border schemes already exist, for example, the Kariba South power station between Zambia and Zimbabwe and the Ruzizi hydroelectric station between Burundi, the DRC and Rwanda. Other hydropower generating facilities have bilateral agreements that play a key role in cross-border trade in electricity. At the same time individual countries are continuing to develop renewable energy sources for decentralised generation of electricity, which can be suitable solutions for increasing access in rural areas.

The EU's recent Green Paper on energy[11] sees interconnection of energy systems as one of the priority areas. Other priorities include the international promotion of the rational use of energy and renewable energy, which requires dialogue with between producer, and consumer countries. Interconnectivity would help Europe to diversify its sources of supply, while upgraded and new infrastructure would improve the security of energy supplies. Within the context of the Partnership, concrete measures are needed to develop energy partnerships with producer and transit countries. The Partnership could also improve the development of energy and transport facilities (especially in ports) of producer countries that allows more efficient use of their resources and attracts foreign investment.

Within the thematic programme of "Environment and sustainable management of natural resources, including energy" the EUEI, JREC and the future COOPENER programme will be able to support the EU-Africa Partnership on Infrastructure. The COOPENER programme could provide institutional support for improving access to sustainable energy services and actions aimed at improving energy security, e.g. by stimulating regional cooperation between countries, the private sector and non-governmental organisations for promoting regional interconnectivity.

A basis for dialogue: a focus on interconnectivity

The map shows the main electricity interconnections identified by NEPAD and RECs. It will guide the dialogue to identify priority action and the financial set-up.

NEPAD i-STAP refers to the power pools as the entities responsible for implementing the projects. The power pools include national utilities of member countries that are responsible for optimising use of regional energy resources and country-to-country support during an energy crisis.

The power pools are based on a multitude of legal documents, such as inter-governmental, inter-utility agreements, agreements between operating members and operating guidelines. The present situation with the power pools in the continent is as follows:

North African region: the Maghreb Union, COMELEC, which includes Mauritania, Morocco, Algeria, Tunisia and Libya.

Southern African region: Southern Africa Power Pool (SAPP) - DRC, Angola, Zambia, Tanzania, Namibia, Botswana, Zimbabwe, Malawi, Mozambique, Lesotho, Swaziland and South Africa.

West African region: West Africa Power Pool (WAPP) - Senegal, Guinea Bissau, Gambia, Guinea Conakry, Sierra Leone, Ivory Coast, Mali, Burkina Faso, Niger, Ghana, Togo, Benin, Nigeria and Cape Verde.

Central African region: Central Africa Power Pool (CAPP) - Cameroon, Gabon, Chad, CAR, DRC, Equatorial Guinea, Sao Tome, Congo and Angola. Applications from Rwanda and Burundi are being processed.

East African region: Eastern Africa Power Pool (EAPP) - Egypt, Sudan, Ethiopia, Uganda, Kenya, Rwanda and Burundi. Participation by Eritrea, Somalia and Tanzania is on hold.

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[11] COM(2006) 105.

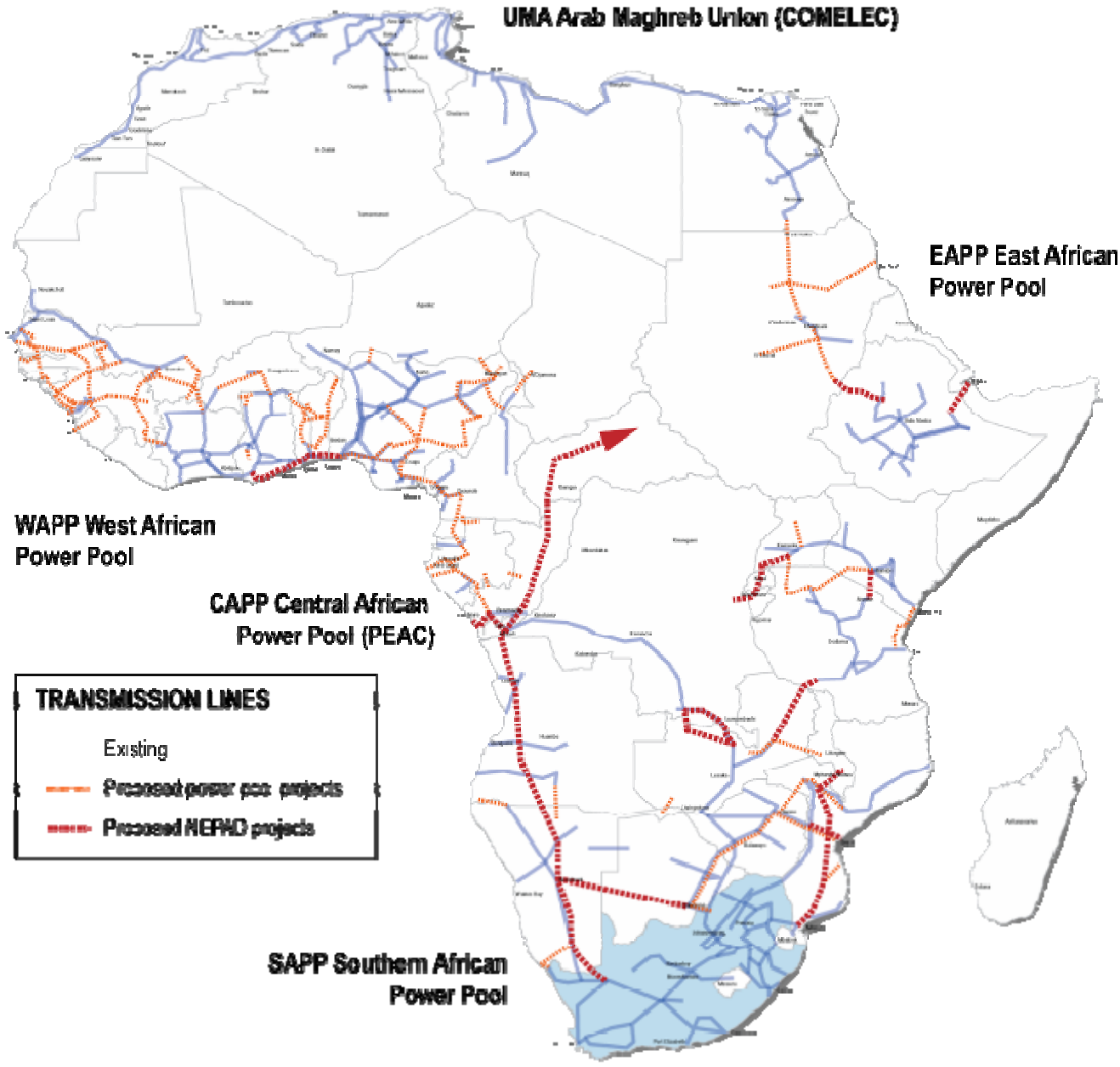
Among these power pools, SAPP and WAPP are more mature than CAPP and EAPP, which are very recent. This is reflected on the map, which shows that interconnections in the WAPP and SAPP regions are more clearly defined than in the EAPP and CAPP regions. Some of the interconnections shown on the map are being implemented or are near financial closure.

NEPAD i-STAP envisages support for:

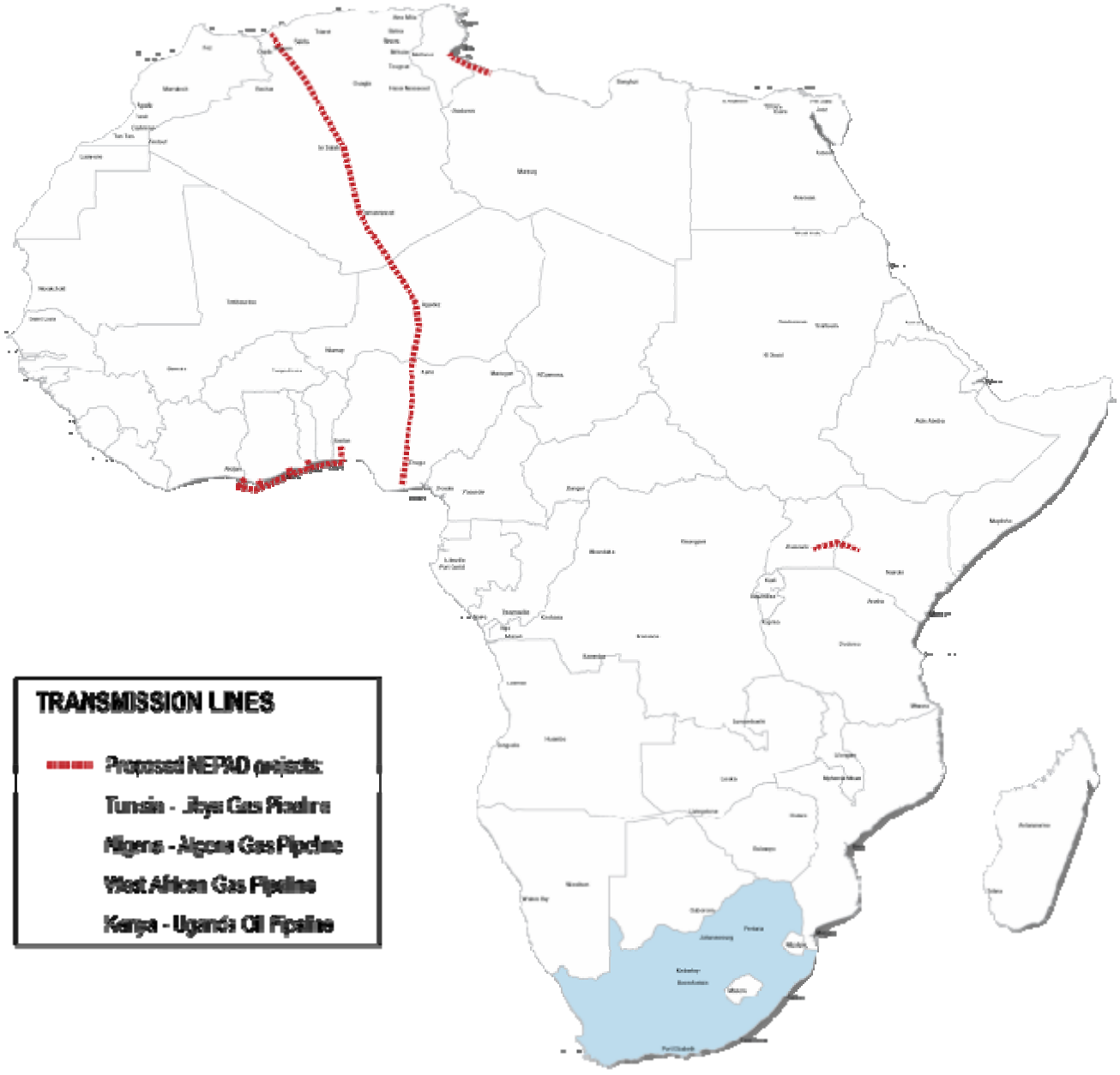
- projects of continental relevance - identified by a bold, dotted line,
- regional power pools - identified by a lighter dotted line,
- capacity-building activities, especially for power pools, NEPAD, AUC, AFREC and regulatory institutions, some of which will be financed by the EUEI Energy Facility.

NEPAD has also identified the Nigeria-Algeria gas pipeline as a priority, together with other oil and gas projects, such as the West Africa gas pipeline (under construction), the Kenya-Uganda oil pipeline and the Tunisia-Libya gas pipeline.

ELECTRICITY INTERCONNECTIONS



OIL & GAS PIPELINES IDENTIFIED BY NEPAD



The EU-Africa Partnership on Infrastructure: Water

A brief overview

Water resources are unevenly distributed and erratic rainfall exacerbates equitable access. Many African countries suffer large seasonal rainfall fluctuations and periodic cycles of drought and flood. Climate change will exacerbate the extremes of variability of water availability. As a result, the population living in water-scarce countries in Africa will rise to over 400 million by 2010, mainly located in North Africa. These levels of water scarcity constrain food production, ecosystem protection and economic development, particularly among the poor.

Most of Africa's water resources are shared and cross borders. Transboundary river basins need joint management for conservation and equitable resource sharing. Integrated water resource management provides such a framework and will also promote peace and security in transboundary water basins. This framework is crucial as some countries' resources originate beyond their borders, for example Mauritania (95%) and Botswana (94%). There are some 60 international river and lake basins in Africa, although fewer than 10 have the cooperation agreements necessary for sustainable management and equitable sharing of resources between riparian states. One notable example of cooperative water resource management is the Nile Basin Initiative, a partnership between the Nile riparian states led by the Council of Ministers of Water Affairs. It aims to achieve sustained socio-economic development through equitable use of the common Nile Basin water resources. Creating new river basin organisations and revitalising existing organisations is one priority of the African Ministerial Council on Water in its efforts to deliver the African Water Vision for 2025.

More effective management of water resources is needed to improve water security and the affordability of water services at country level and to contribute effectively to the MDGs. Today over 300 million people – some 42% of Africa's population - still have no access to safe water. Similarly access to basic sanitation is denied to 60% of the population. Without clean water and good sanitation, diarrhoea and other water-borne diseases will multiply. Food security and economic productivity will be threatened and HIV/AIDS treatment will be less effective. Africa has potential for hydropower production of about 1.4 million GWh per year. Currently, however, despite the immense possibilities, hydropower generation represents less than 5 percent of the electricity generated. Water for industrial use is also very low and accounts for only 6 percent of water used. Integrated water resource management at a basin level provides the framework for managing these competing demands for water.

Making better use of scarce resources through better water management, efficient irrigation, reducing leakage and waste and avoiding pollution are all necessary in order to reap the estimated economic benefit of US$ 22 billion when Africa achieves its water and sanitation MDGs. More efficient, more sustainable water use and basin management should also contribute to the goals of halting or reversing the current loss of natural resources and biodiversity by 2015.

Therefore, strong political will and financial commitment to joint management, development and harnessing of transboundary water will contribute to reducing poverty at local level. Better use of water at country level will enable national authorities to expand access to water and sanitation at more affordable prices. This, however, depends on balancing investments between infrastructure provision, governance and providing national and local authorities with the capacity effectively to manage and monitor water resources and service provision.

A basis for dialogue - transboundary water management in Africa

There is a need to get riparian states to cooperate on the use of the resources of shared rivers and ground water basins. This involves (i) preparing water resources management plans that address the needs of all users and respect the needs of the environment, and (ii) developing the infrastructure (dams, irrigation systems, water supplies, hydro-electric power) that is needed to reduce vulnerability to droughts, to manage floods better, to ensure more water, more food and more electricity in a way that takes account of the needs of the river system itself. This means laying a strong foundation for cooperative action and for future investment projects to follow the decision-making framework of the World Commission on Dams Report of 2000.

Integrated Water Resources Management (IWRM) is central to EC development policy related to water, to the EU Water Initiative (EUWI) and the Africa-EU Partnership on water affairs and sanitation launched at the WSSD. As a result of the EUWI, €10 million from 9th EDF is being used to support transboundary management in five basins in Africa (Niger, Volta, Lake Chad, Kagera and Orange/Senqu). The 9th EDF ACP-EU Water Facility (€500 million) is also supporting transboundary water management and the establishment and reinforcement of river basin authorities as well as investments at the national and local level. These Water Facility operations are complementary to investments by the National Indicative Programmes. Funds from the ACP-EU Water Facility have been allocated to the Nile Basin Initiative (NBI - €18 million), the Niger and the Senegal (€2 million each). The EC is thereby supporting regional water management in specific fields:

- Establishment of and support for the "Shared Vision Programme" in the Nile and the Niger. This provides the basic framework for sustainable use of shared water resources and is a prerequisite for sound investment in infrastructure.

- Support for existing basin authorities (Senegal, Orange/Senqu and Lake Chad) and for the establishment of new ones (Volta).

- Multi-purpose basin development addressing the different water uses, as part of the NBI.

- In the field of disaster preparedness, support for a flood preparedness programme in the Eastern Nile for Ethiopia and Sudan, as part of the NBI.

- Knowledge and monitoring of water resources for better management. The EC is supporting the HYCOS Programme (Hydrological Cycle Observing System) and the establishment of a pan-African water information system.

Building on this substantial and varied support already provided by the EC for transboundary basin management in Africa, further opportunities will be developed to respond to AU-NEPAD/REC priorities. Funds from the ACP-EU Water Facility will support the start-up phase of this process. Initially, the focus must be on basins prioritised by NEPAD in its 2005

STAP for Transboundary Water Management (Niger, Senegal, Congo, Lake Chad, Nile, Okavango and Zambezi) and on expanding support for other basins, particularly:

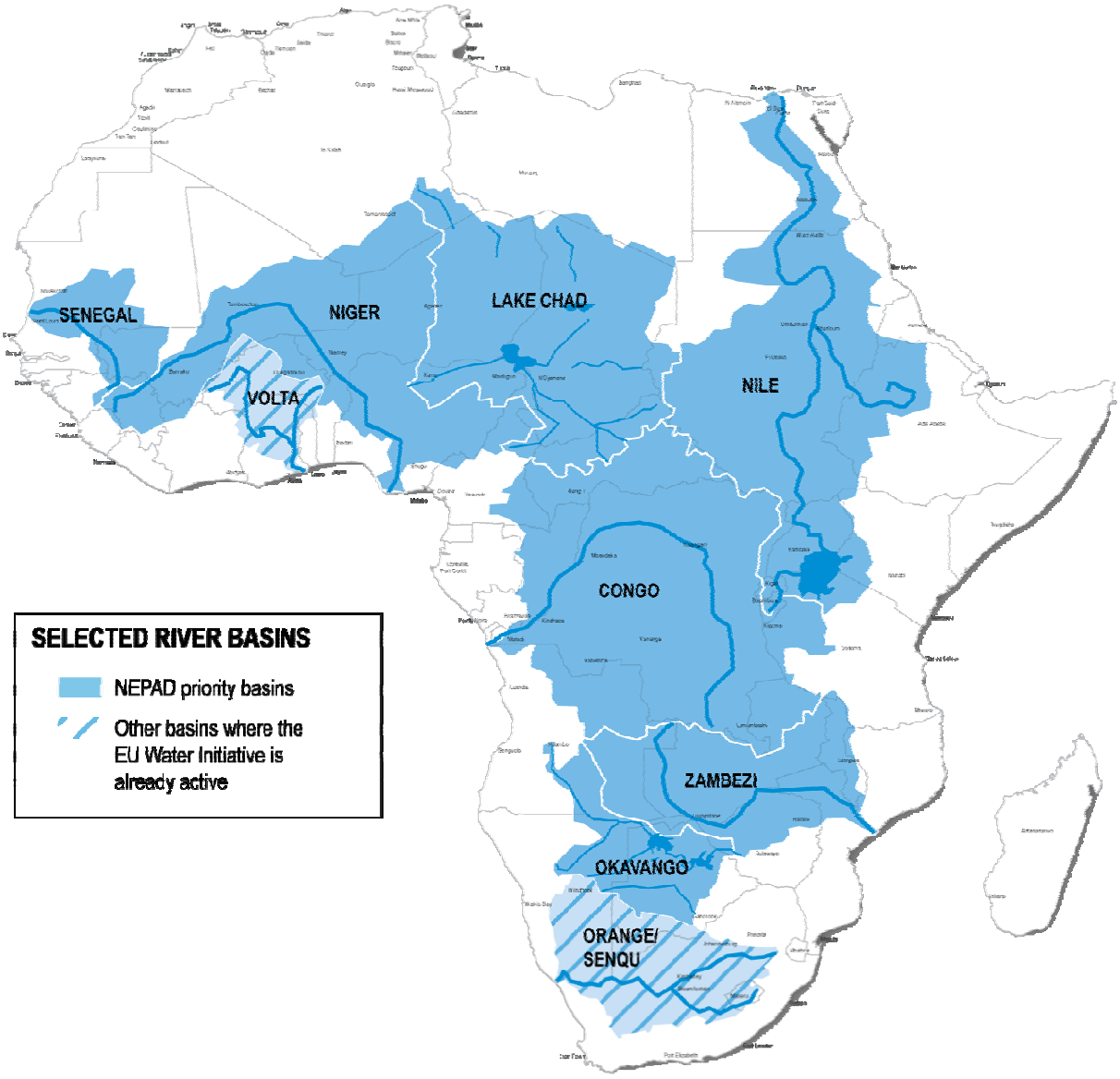
- Establish and support for "shared vision programmes" as the framework for sustainable use of shared water resources and a prerequisite for sound investment in infrastructure.

- Establish and support for basin authorities and building their capacities, as a necessary foundation for sustainable infrastructure development.

- Contributions to project preparation and implementation to complement existing instruments (within the AfDB, NEPAD, SADC, etc.).

The programme of action will be developed and implemented in close collaboration with African institutions (AU-NEPAD, AMCOW, RECs, AfDB) and other donors (such as Germany which has undertaken a programme to initiate support for the Congo basin).

SELECTED RIVER BASINS



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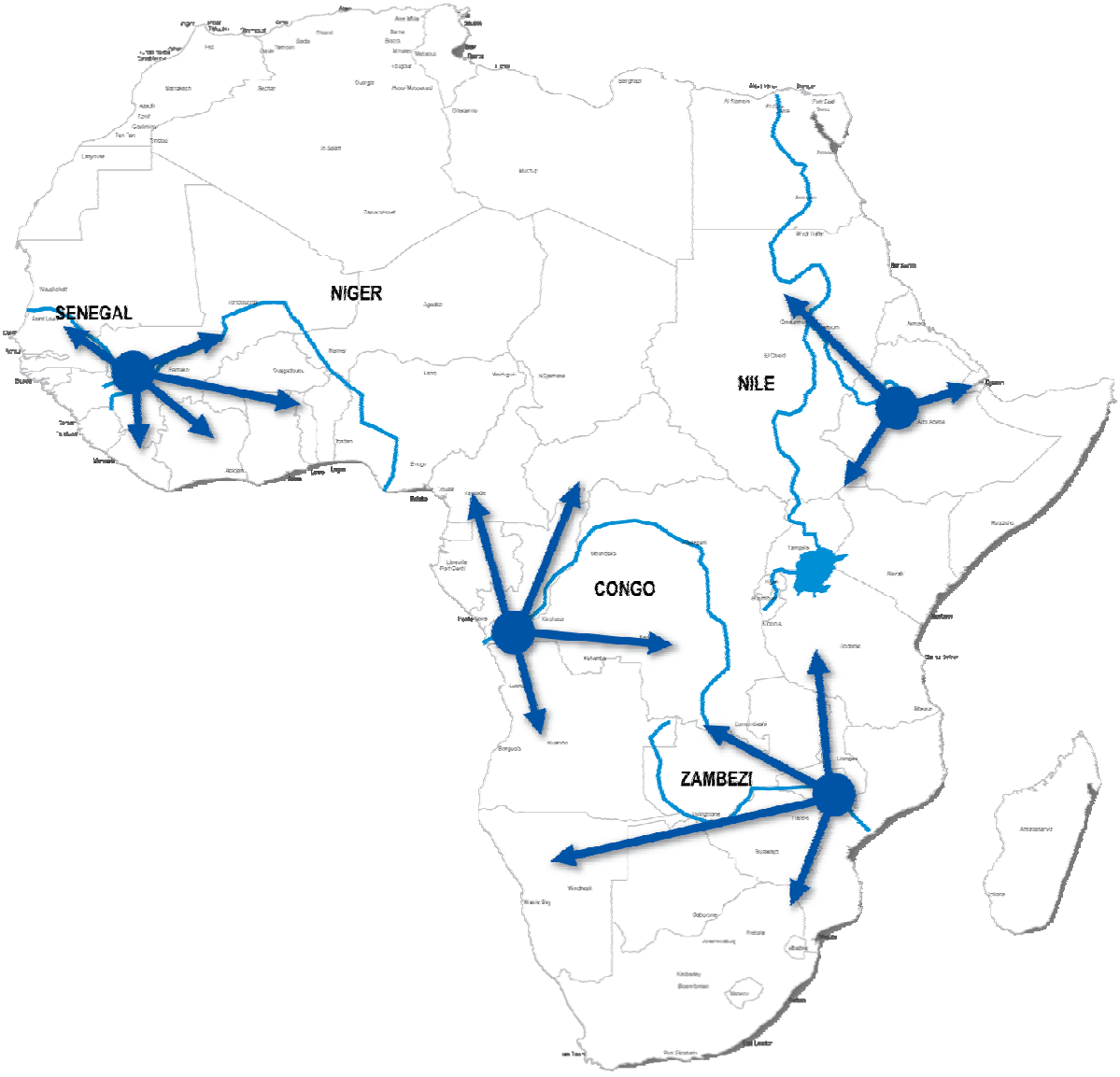
PRIORITY AREAS FOR INCREASED HYDROPOWER POTENTIAL based on NEPAD I-STAP



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The EU-Africa Partnership on Infrastructure: ICT

A brief overview

The uptake of ICTs in Sub-Saharan Africa has been hampered by the non-existence of appropriate regulatory frameworks and the inadequacy of infrastructure. The number of fixed telephone lines is minimal and the waiting period for a telephone connection may be several years. Fortunately mobile telephony and pre-paid cards are solving many of Africa's communication problems. Additionally, Africa is wasting US$400 million each year by intra-African telecom traffic that transits outside Africa because of a lack of interconnections and clearing houses. Large bandwidth at reasonable costs remains an issue for landlocked countries. Building on the broad experience of the EU and following the 2nd phase of the World Summit on the Information Society (WSIS), the Communication "Towards a Global Partnership on the Information Society: Follow up to the Tunis Phase of the WSIS" of April 2006 - paved the way for addressing the digital divide in developing regions, notably Africa.

A basis for dialogue: regulatory reform, broadband and non-commercial e-application investment

Support to Regulatory Reform: It is widely recognised that the private sector can play a major role in ICTs. Even in Africa where many incumbent operators are still state-owned, several governments have privatized their fixed-telecom operator. Moreover, the mobile telecom operators are mainly in the hands of the private sector, local or foreign. To attract the private sector a stable legal environment and an appropriate regulatory framework are needed.

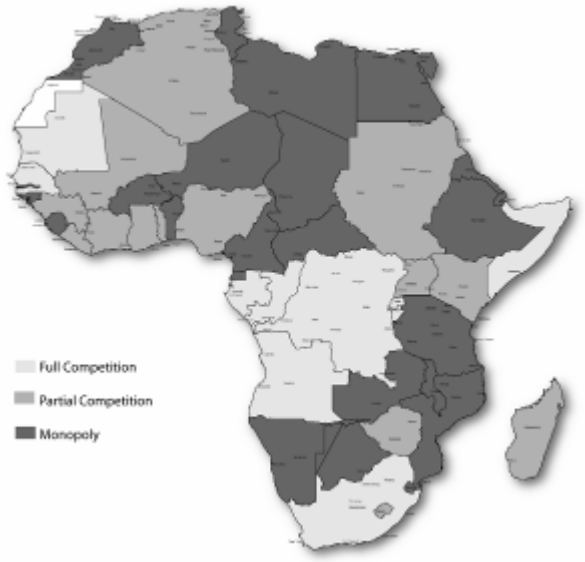


Figure 1: ICT competition

This map compares monopolistic or competitive practices in services such as local, domestic long-distance, international, wireless local loop and mobile.

Source: ITU

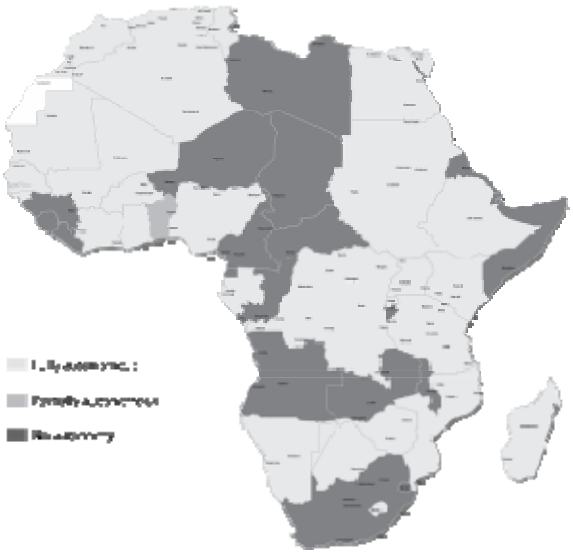


Figure 2: Independent regulators

Full autonomy implies national regulatory authorities that are independent from political and financial pressures and that are staffed by appropriately trained professionals.

Source: ITU

Therefore, while ensuring that the social aspects of liberalisation are considered, it is recommended that action be directed towards:

- establishing and consolidating national and regional ICT strategies, which support poverty reduction strategies;

- creating national and regional regulatory frameworks for electronic communications that ensure a level playing field and facilitate competition whereby competing firms are assured of equal access to technology and fair pricing;

- establishing independent national regulatory authorities.

Activities could consist of assistance measures to manage the transition to liberalised telecommunications markets in order to facilitate network interconnection and interoperability of services, while fostering the reduction of telecommunication costs and the introduction of new technologies. This would include training activities, technical assistance and sharing of good practices for regional policy makers and regulators.

To implement these activities, the Commission will favour a sub-regional approach in order to take benefit of an economy of scale and to promote the emergence of broader markets.

Investment in technologically neutral broadband infrastructure: There are presently several broadband technologies options for rolling out a broadband infrastructure on the African continent: wireless technologies, including satellite, wire-line technologies (e.g. optical fibre networks, but also power line communications) and a combination of these.

Support to the deployment of a broadband infrastructure at pan-African level should be based on a technologically neutral approach with choices between the different options relying on current and planned ICT infrastructures and considerations related to deployability, bandwidth, coverage and cost.

Principal backbones infrastructure, existing and planned, in Africa

EASSy: Submarine cable running along the African East Coast that would close the ring around Africa.

COMTEL: this consortium is entirely composed of incumbent telco covering 21 countries, reflecting the COMESA membership basis of the organisation.

Central African ring: This is a network infrastructure proposed by Celtel, that would link a range of countries including: Kenya, Malawi, Uganda, Tanzania and Bukoba in Eastern DRC.

COM-7: This route proposed by Com-Africa connects seven countries in East and Southern Africa. It has no incumbent telco involvement.

West-East-West linkages E2-E3-E4-E5: The trans-Sahel backbone linking Burkina Faso, Niger, Chad, Sudan, and Uganda . A redundant ring could also be created by linking with the Central African backbone by continuing South through Chad via Cameroon

to Gabon, taking advantage of the Cameroun-Chad fibre backbone that has been laid along the oil pipeline.

There is a consensus that in circumstances where the market does not deliver, state-intervention should not be excluded. Such situations include (i) the rural sector, (ii) trans-border communications; (iii) post-conflict situations, (iv) networks that are operated by the governments for internal usage (in principal to be avoided), and (v) broadband networks that are operated according to the "Open Access Principle."

Non-commercial e-services: The objective would be to promote the usage of the underlying ICT infrastructures thus encouraging further investment through the development of e-applications and services of high societal impact such as education, health, agriculture, environment and e-government.

The development of projects in these domains should exploit synergies with EU programmes and initiatives such as trans-European Networks for Telecommunications, TEN-Telecom, i2010, the EU Research and Development Framework Programmes, the Interchange of Data between Administrations (IDABC) Programme, or the recent established co-operation between ESA and DEV to promote telemedicine through satellites. Examples of these are:

- Research and Education Networks: the aim would be to improve the connectivity of African national research and education networks and to interconnect them with the EU's GÉANT2. This would integrate African researchers into global research communities and limit the "brain drain".

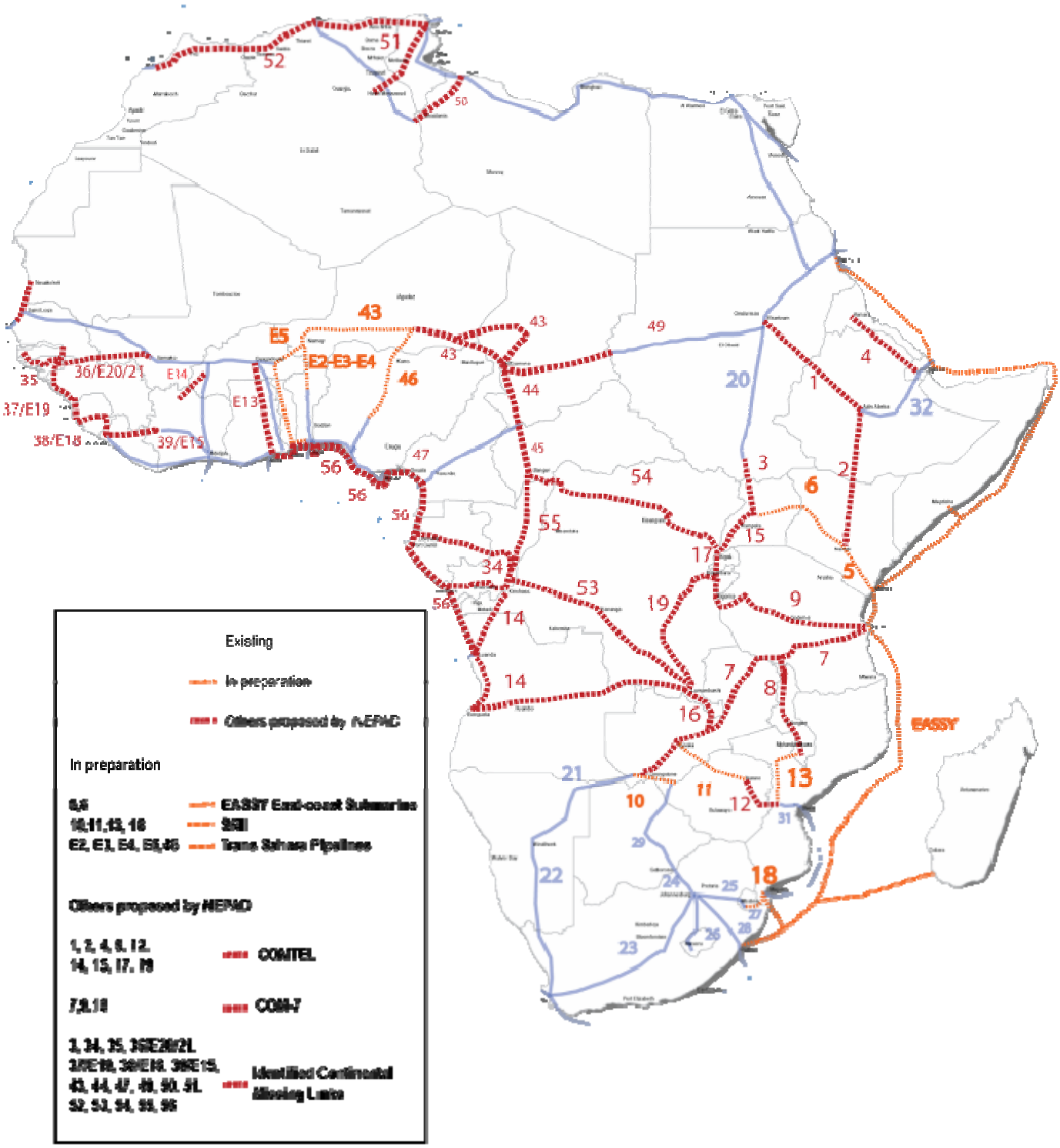
- The recently established collaboration between the ESA and DEV to promote telemedicine through satellites should be furthered. A task force composed of the relevant African Organizations, the WHO, EC and ESA has been set up to identify a framework of appropriate actions for a telemedicine program in sub-Saharan Africa. The TTF activities will be complemented by an analysis of the cost benefits of the implementation and by a study of system architecture and related costs of a pan-African satellite-based telemedicine.

- e-government between the AUC and its Member countries in a similar way to the EU's Interchange of Data between Administrations programme,

- the NEPAD e-Schools Initiative that will connect 600,000 African schools to the Internet and provide better education to the millions of children,

- the adaptation to the needs of Africa of the products and services developed by the EU Research and Development Framework Programmes in the field of e-learning, telemedicine and e-government.

ICT FIBRE NETWORK INTERCONNECTIONS



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EC commitments to transport, energy, water and sanitation, and ICT in Africa (€)

Sub Saharan Africa commitments are EDF, North Africa commitments are EU budget resources

	2003	2004	2005	Total
Transport				
Sub Saharan Africa	628,000,000	401,400,000	807,400,000	1,836,800,000
North Africa	96,000,000,	43,000,000	19,000,000	158,000,000
Energy				
Sub Saharan Africa	500,000	6,300,000	4,000,000*****	10,800,000
North Africa	-	8,600,000	-	8,600,000
Water and sanitation				
Sub Saharan Africa	169,200,000	137,900,000	313,900,000******	621,000,000
North Africa	31,700,000	77,900,000	102,700,000	212,300,000
ICT				
Sub Saharan Africa	11,100,000	21,000,000	-	32,100,000
North Africa	-	4,000,000	-	4,000,000
Total				
Sub Saharan Africa	808,800,000	566,600,000	1,125,300,000	2,500,700,000
North Africa	127,700,000	133,500,000	121,700,000	382,900,000
Grand total - Africa	936,500,000	700,100,000	1,247,000,000	2,883,600,000

Source: EuropeAid Cooperation Office

Notes

* The ACP-EC Council of Ministers decided on 25 June 2005 to set up the Energy Facility. The Facility will commit €220 million by the end of 2007. The call for proposals has been launched.

** The ACP-EC Water Facility has resources of €500 million. During 2004-2005, €125 million was committed and the remaining €375 million will be committed by the end of 2007.

For Sub Saharan Africa: commitments are exclusively EDF programmable resources (and the Water Facility).

For North Africa: commitments are exclusively EU budget resources.

Abbreviations

ACP	Africa, Caribbean, Pacific
AfDB	African Development Bank
AFREC	African Energy Commission
AIDS	Acquired Immunodeficiency Syndrome
AMCOW	African Ministerial Council on Water
AU	African Union
AUC	African Union Commission
CAPP	Central Africa Power Pool
CAR	Central African Republic
COMELEC	Comité Maghrebin de l'Electricité
COMESA	Common Market for Eastern and Southern Africa
COOPENER	Cooperation Energy Programme
COSCAP	Cooperative Development of Operational Safety and Continuing Airworthiness Project
DAC	Development Assistance Committee (of the OECD)
DFI	Development Financing Institutions
DRC	Democratic Republic of Congo
EAPP	Eastern Africa Power Pool
EASSy	Eastern Africa Submarine Cable System
EC	European Community
EDF	European Development Fund
EIB	European Investment Bank
EPA	Economic Partnership Agreement
ESA	European Space Agency
EU	European Union
EUEI	EU Energy Initiative
EUWI	EU Water Initiative
FPA	Fishery Partnership Agreements
GDP	Gross Domestic Product
GNI	Gross National Income
HIV	Human Immunodeficiency Virus

HYCOS	Hydrological Cycle Observing System
ICAO	International Civil Aviation Organisation
ICT	Information and Communications Technology
IDABC	Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens
i-STAP	Infrastructure Short Term Action Plan (of NEPAD)
ITU	International Telecommunications Union
IWRM	Integrated Water Resources Management
JREC	Johannesburg Renewable Energy Coalition
LDC	Least Developed Countries
MDGs	Millennium Development Goals
NBI	Nile Basin Initiative
NEPAD	New Partnership for Africa's Development
NIP	National Indicative Programme
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
REC	Regional Economic Community
REEP	Renewable Energy and Energy Efficiency Partnership
RIP	Regional Indicative Programme
SADC	Southern African Development Community
SAPP	Southern Africa Power Pool
SESAR	Single European Sky ATM Research
SSATP	Sub-Saharan Africa Transport Programme
STAP	Short Term Action Plan (of NEPAD)
TEN	Trans-European Networks
TTF	Technology Transfer Facility
WAPP	West Africa Power Pool
WHO	World Health Organisation
WSSD	World Summit on Sustainable Development