

*UbuntuNet Alliance  
for  
Research and Education Networking*

*EC Workshop  
Brussels  
6-7 March 2006*



**UbuntuNet Alliance**  
for Research and Education Networking

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# *Agenda*

- 1. Rationale for Education and Research Network*
- 2. The UbuntuNet Alliance*



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# *It's about sharing (1)*

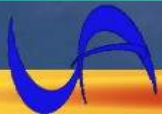
Within each institution, **END-USERS...**

## ❖ **have their own**

- ❖ PCs / workstations
- ❖ Ethernet connections to first hub or switch
- ❖ Printers (some times)
- ❖ Storage space on file servers
- ❖ Email accounts and mail folders

## ❖ **but share**

- ❖ Campus backbone capacity
- ❖ Access to licensed software
- ❖ E-content
- ❖ Network printers
- ❖ Internet access
- ❖ Mail domain e.g. mail.uem.mz



## *It's about sharing (2)*

*Within each NREN, institutions...*

### ❖ **have their own**

- ❖ IP address blocks
- ❖ Connection circuits to the NREN

### ❖ **but share**

- ❖ NREN's backbone capacity
- ❖ NREN's network identity
- ❖ NREN's peering agreements with other RENs
- ❖ NREN's general Internet access
- ❖ Other NREN services



# *It's about sharing (3)*

*Within each Regional REN, **NRENs**...*

## **❖ have their own**

- ❖ Network identities
- ❖ Connections to the RREN

## **❖ but share**

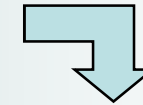
- ❖ RREN's network identity
- ❖ RREN's cross-border backbone capacity
- ❖ RREN's peering with other RENs
- ❖ RREN's general Internet access
- ❖ Other RREN services



# *Do we need an RREN?*



These countries .....all want



- ❖ Angola
- ❖ Botswana
- ❖ DRC
- ❖ Kenya (KENET)
- ❖ Lesotho
- ❖ Malawi
- ❖ Mozambique (MoRENNet)
- ❖ Namibia
- ❖ Rwanda
- ❖ S Africa (TENET)
- ❖ Swaziland
- ❖ Tanzania
- ❖ Uganda (RENU)
- ❖ Zambia
- ❖ Zimbabwe
- ❖ ...others...

- ❖ General Internet access
- ❖ Connections to each other; and to
  - ❖ Géant
  - ❖ Abilene (Internet2)
  - ❖ EUMEDCONNECT
  - ❖ CANet (Canadian REN)
  - ❖ TEIN2 (China, Japan, Malaysia)
  - ❖ AARNET (Australian REN)
  - ❖ ...others...

*..and they want it all very CHEAP !!*



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## *Resources they'd all have to use*

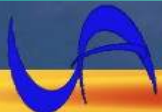
- ❖ Cross-border links operated by telcos, mobile operators, power companies,...
- ❖ Sub-marine cable connectivity
  - ❖ SAT-3 West Africa cable (WASC)
  - ❖ SAT-3 Far East cable (SAFE)
  - ❖ East Africa Submarine System (EASSy) (proposed)
- ❖ In some cases satellite capacity as an interim solution!



*So, should each do it on its own?*

# No way!

- **Let's create a Regional REN!**
- **Let's share a regional backbone!**
- **Let's share peering links!**
- **Let's share general Internet connectivity**
- **Let's share knowledge and other resources**



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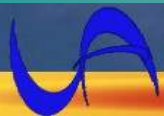
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*... and so ...*

# *The UbuntuNet Alliance*



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# *The UbuntuNet Alliance (1)*

- ❖ To be incorporated as a nonprofit company limited by guarantee
  - ❖ Wants to serve all bona-fide NRENs in Sub-Saharan Africa
  - ❖ Focused on optical fibre – not VSAT
- ❖ Members: *VCs/D-VCs nominated by NRENs*
- ❖ Council of Members will:
  - ❖ meet annually (normally)
  - ❖ Appoint Chair, Deputy-Chair, Board of Directors
- ❖ Initiators acting as Interim Board
  - ❖ One person from each of Kenya, Malawi, Mozambique, Rwanda, South Africa



## *The UbuntuNet Alliance (2)*

- ❖ Announced at WSIS, Nov 2005, Tunis
- ❖ Strong support from
  - ❖ SARUA Vice-Chancellors
  - ❖ AAU (Dr Sawyerr)
  - ❖ NEPAD (Dr Henry Chasia, e-Africa Commission)
  - ❖ IDRC (Canada), SIDA (Sweden), BMZ (Germany)
- ❖ UA hopes to apply for assistance from EC
  - ❖ Possible “feasibility study” later this year
  - ❖ UA enjoys support from national government
- ❖ OSI and IDRC have approved seeding grants



# *UbuntuNet Projects*

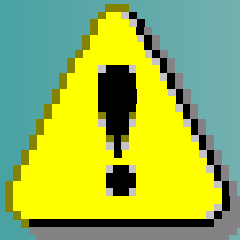
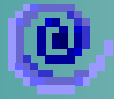
- ❖ SARUA Fiber Study of available fibre infrastructure
- ❖ Get the Alliance incorporated
  - ❖ April 2006
- ❖ Try to secure wholesale bandwidth on:
  - ❖ EASSy
  - ❖ Cross-border fibre backbones in the region
- ❖ Establish web site, discussion lists,...
- ❖ Farside mail scrubbing



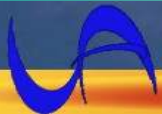
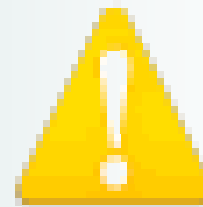
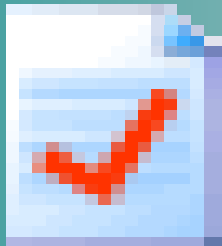
## *In Summary ...*

- ❖ UbuntuNet Alliance will be the Regional REN for Eastern and Southern Africa
  - ❖ Access to Cross-border gigabit fibre capacity
  - ❖ Long haul gigabit continental REN connections
  - ❖ Support Services to RENs
- ❖ Gaining access to EASSy capacity is a mean to realize this vision but not the end.





*Obrigado !*



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