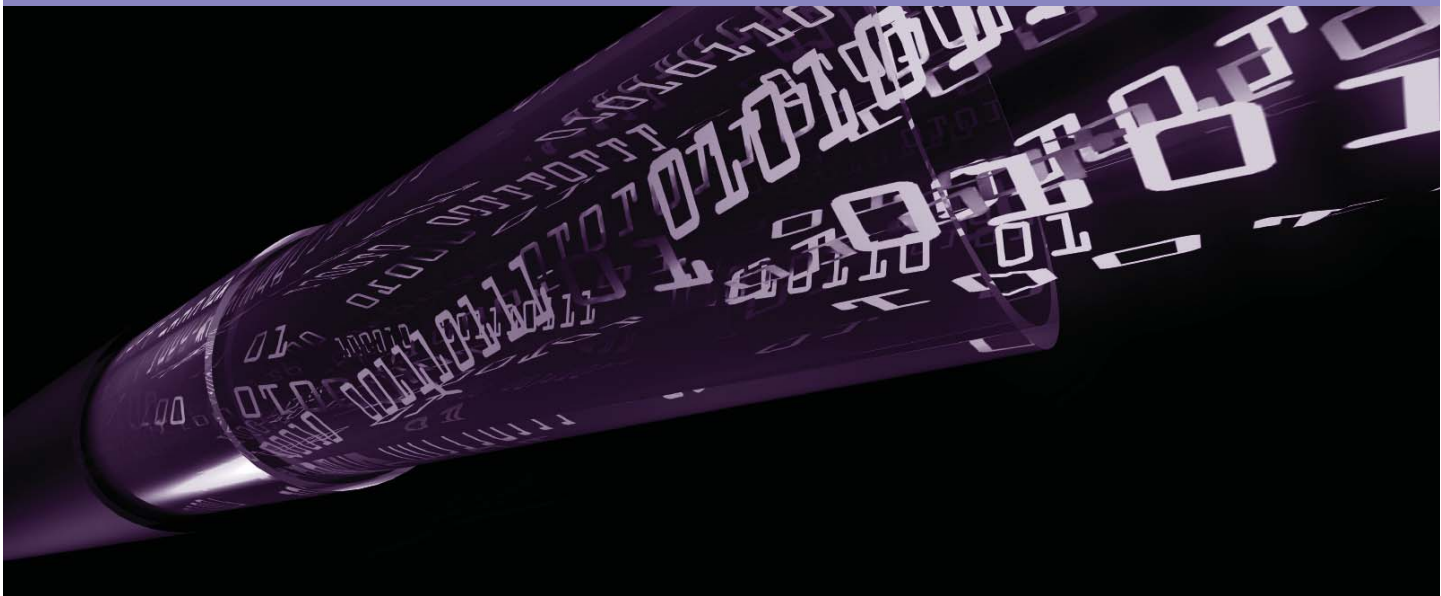




Commonwealth
Telecommunications
Organisation

WWW.CTO.INT

23-27 February 2009 Gaborone, Botswana



Overview

Next generation networking (NGN) describes the latest state-of-the-art networking platforms in the process of development or already in use today. This highly relevant industry course will provide an overview of next generation network technologies and services including emerging standards. Concepts and issues covered include:

- Key drivers of NGN
- Functional structure of NGN architecture
- NGN technologies and the role of the internet protocol (IP), wireless technology and fibre optics
- The process of migration to NGNs – economic and technical considerations
- The role and importance of regulation and standards in NGN
- Country-specific presentations on national NGN plans

For more programmes and courses run by the PDT contact us at:

tel +44 (0) 870 777 7697 fax +44 (0) 870 0345 626 email programmes@cto.int



Learning Outcomes

At course completion, delegates would have:

- Developed keen understanding of the key drivers of NGN
- Learnt to describe the structure of an NGN
- Identified services provided by NGNs
- Gained deep insight into the process of migration to NGNs
- Built appreciation of the role of regulation
- Identified the importance and role of standards in NGN development

Key Objectives

- Introduce concepts of next generation networks
- Examine past and current state of networks to serve as motivation for the development of NGNs
- Understand key drivers of NGNs
- Examine underlying technologies that form the building blocks of NGNs
- Explore structure of NGNs to enable understanding of its evolution
- Discuss services provided by NGNs
- Discuss the process of migration to NGN
- Examine the place of regulation in NGNs

Who Should Attend?

- Network managers and technical staff from a telecoms background
- All personnel who require an understanding of NGNs and the future direction of services, converged technologies, architectures and implementation issues

Pre-requisites

A general understanding of telecommunications and data/voice communications will be helpful

Learning Environment

Interactive approach using individual and group presentations, discussion. Possibility of field trips (to be decided by host country).

Course Outline

Drivers and Motivations of NGNs

- Competition
- Customer needs
- Convergence

Overview of NGN

- Definition
- Attributes: a discussion of some of the fundamental characteristics of next generation networks derived from the definition
- NGN functional structure: overview of the functioning of an NGN arising from its definition by separating services-related functions from access or transport functions

Key Technologies of NGNs

- Internet Protocol: examination of the key factors that have made IP the underlying packet technology for NGNs
- Wireless: access the place of wireless technology in meeting some of the requirements of NGNs, such as mobility
- Optics: discussion of the role of optical fibre as a broadband transport technology in the evolving NGN

NGN Services

- Multiservices: transmission of several types of traffic over a single network and its advantages
- Virtual Private Network (VPN): role and characteristics of VPN as a private network deployed over a public network such as the NGN

Migration to NGN

- Non-technical aspects: economic and business considerations in the move to NGN
- Technical aspects: technologies and technical considerations of the migration to NGN

Regulations and NGNs

- Regulation and convergence
- Competition

NGN Standards and Development

- Role of standards: examination of the place of open standards and interfaces in the evolution of NGNs
- Standards development organisations (SDO): discussion of the activities of SDOs such as the ITU in the development of NGN standards with reference to their past, current and future activities

Presentations of National Networks and NGN plans

- Botswana: national network and NGN plans
- Botswana: regulation
- Mozambique: national network and NGN plans
- Nigeria: national network and NGN plans

Hosted By:

Botswana Telecommunications Corporation

In Partnership With: Telecommunications Regulatory Board of Cameroon

Other sample courses

- Marketing Strategies for New Services & Applications
- ICT Regulation
- VoIP and MPLS
- GSM Planning and Network Management
- Diploma in Telecommunications Management
- WiMAX and CDMA 2000

“ **Course: Next Generation Networks**
The training will go a long way in benefiting Zamtel.
DELEGATE, ZAMBIA TELECOMMUNICATIONS CO. ”

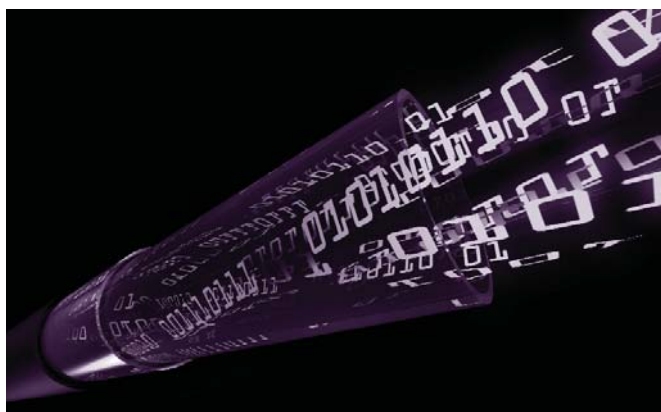
“ **Course: Product Development and Management**
The content was very good and I'm of the view that
it would be of tremendous help to me as product
executive.
DELEGATE, CABLE & WIRELESS SEYCHELLES ”

“ **Course: New IP Networks**
Excellent presentation arousing my interest in the
subject which is directly related to my job.
Fundamentals and concepts were clear, I have
enriched myself which is good both for myself
and my company.
DELEGATE FROM MAURITIUS TELECOM ”

“ **Course: Licensing in a Converged Environment**
This is the first opportunity we had to a course of
such high standard and accreditation.
DELEGATE, INFORMATION AND
COMMUNICATION AUTHORITY OF SOUTH AFRICA ”

About the CTO

The Commonwealth Telecommunications Organisation (CTO) is an international development partnership between Commonwealth and non-Commonwealth governments, business and civil society organisations. It provides the international community with effective means to help bridge the digital divide and achieve social and economic development through the use of Information and Communication Technologies (ICT) in the specific areas of Telecommunications, IT, Broadcasting and the Internet.



Course Leader

Dr. Ndeh Ntomambang Ningo



Dr Ndeh Ningo is a highly qualified computer and systems engineering specialist with over 20 years of teaching and consultancy experience. Dr Ningo is currently Senior Lecturer at the Department of Electrical Engineering, Ecole Nationale Supérieure Polytechnique, Yaoundé. Among other assignments, Dr Ningo has been a consultant to the World Bank, World Health Organisation, Ministry of Public Health of Yaoundé, and, University Centre for Health Sciences, University of Yaoundé. Dr Ningo's current research interests include the design and analysis of optimum and suboptimum receivers for signal detection in non-Gaussian noise, application of self-critical statistical methods to signal detection, cyber security and e-governance.

Dr Ningo holds a Bsc in electrical engineering, a M.Eng in electrical engineering and a Ph.D in computer and systems engineering.

About the Programme for Development and Training

- Managed by the CTO, the PDT is a unique low-cost membership programme providing needs-based professional training and capacity building courses on telecommunications policy, regulation, technologies and telecoms business management.
- The PDT has delivered over 3600 bilateral training and consultancy projects, covering every aspect of the telecommunications industry, training over 35,000 professionals in 33 countries of the Commonwealth.
- The PDT assists governments, regulatory agencies and operators around the world rapidly acquire the necessary internal capacity and know-how to help them achieve goals, through unique strategic training and expert advisory services.
- Training, consulting and other services offered through the programme are developed and delivered by expert practicing professionals who bring actual experience of adopting new industry technologies and concepts.
- The PDT facilitates knowledge-sharing within a comprehensive international network of qualified technology and industry experts, who assist organisations in the deployment of new technologies, the adoption of best practices and the application of business solutions at local level.

Registration form

Course: Next Generation Networks February 2009, Botswana

Course ID: 6329

Please fill in this application form and fax it back to +44 870 034 5626 or return it to the CTO at the address below. Please fill in the form in black ink and use CAPITAL LETTERS.

Personal details

| | | |
|----------------------------------|------------|-----------|
| Mr/Mrs/Ms/Other | First name | Last name |
| Organisation | Job Title | |
| Address | | |
| City | Postcode | Country |
| Tel | Mobile | Fax |
| Email | | |
| Authorising Line Manager's name | | |
| Authorising Line Manager's Email | | |

Payment options

1. Select delegate rate

| | Standard rate | Group discounts | Early registration discounts |
|-------------------|--------------------------------|------------------------------|------------------------------|
| PDT Partners | <input type="checkbox"/> £679 | <input type="checkbox"/> 10% | <input type="checkbox"/> 10% |
| Other CTO Members | <input type="checkbox"/> £679 | <input type="checkbox"/> 10% | <input type="checkbox"/> 10% |
| Others | <input type="checkbox"/> £1132 | <input type="checkbox"/> 10% | <input type="checkbox"/> 10% |

2. Payment mode

Invoice

Invoice me at the above address (Discounts do not apply, payment must be received by us prior to event).

Bank transfer

Make payment to: Coutts & Co.
440 Strand, London, WC2R 0QS, UK
A/C Name: CTO; A/C Number: 08367507
Reference: GB72COUT18000208367507
Sort Code: 18-00-02; Swift Code: COUT GB22

Visa **Mastercard** (tick as appropriate)

Card holder's name

Card holder's billing address (if different from above)

Card number

Valid from M/M/Y/Y Expiry date M/M/Y/Y 3 digit security code on back of card

Date Name Signature

Additional information

To help us improve our services to you and your organisation, please tell us more about yourself and your organisation.

Your role in the organisation

- Strategic / executive
 Planning
 Control
 Operational

Your area of work in the organisation

- Business development
 Corporate affair
 Customer service and care
 Engineering and technical management
 Financial, purchasing & investor relations
 IT / IP management
 Marketing and sales
 Public relations and corporate communications
 Regulatory and legal affairs
 Telecoms network management
 Human resources
 Other

Your organisation type

- Government
 Regulator
 Operator
 Manufacturer
 Other

Your organisation's service areas

- Fixed network / services
 Mobile / wireless network / services
 Satellite network / services
 Internet
 Broadcasting
 Value-added services
 Support
 Other services

REGISTER BY 23 JANUARY 2009 AND RECEIVE A 10% DISCOUNT*

*To benefit from our early booking discount, payment must be received by us by the above date. All discounts apply to credit card and bank transfer payments only.

4 SIMPLE WAYS TO REGISTER

 Fill in and fax this form back to **+44 870 034 5626**

 Call the programme team at **+44 870 777 7697**

 Email the programme team at **programmes@cto.int**

 By post to CTO
**26-28 Hammersmith Grove,
London W6 7BA, UK**

NEED HELP?

Call us now on **+44 870 777 7697** or e-mail the programme team at **programmes@cto.int**

Withdrawals / Cancellations / Refunds
For delegate cancellations/withdrawals, the following refund rules apply:
- 31 days or more prior to event: the full amount less a handling charge of £55
- 30 days or less prior to event: no refund

For CTO cancellations/withdrawals, delegates are entitled to a 100% refund within 60 days of the withdrawal/cancellation. Refunds will be made by bank transfer only.

Summary Terms and Conditions

The CTO will endeavour, as can be reasonably expected, to ensure that the course is delivered to meet delegates' expectations. Registration is subject to availability and payment received by the deadline where specified for each course. Dates may be subject to changes. Travel, accommodation, daily transportation to venue, subsistence and other costs are the sole responsibility of the delegate and are not included in the above fees. Applicants are responsible for their visa arrangements and other formalities wherever required. Course bookings may be cancelled at the discretion of the CTO or its partners. Applicants paying by bank transfer are responsible for bank charges and any other such costs and should ensure the exact amount in GBP Sterling is credited in the CTO bank account. Applicants requiring additional information prior to their booking should ensure they provide sufficient time before the booking deadline. Cancellation rules apply, as summarised above. For a full version of our Terms and Conditions, please visit our website at www.cto.int.

Data Protection / Privacy

The CTO does not sell, rent or lease its customer information to third parties. We may, from time to time, contact you on behalf of a third party/partner about a particular offering that may be of interest to you. In those cases, your unique personally identifiable information (email, name, address, telephone number) is not transferred to the third party/partner. In addition, we may share your information with trusted partners to help us perform statistical analyses, send you by e-mail or postal mail, provide customer support, or arrange for deliveries or other such services. All such third parties are prohibited from using your personal information except to provide these services to the CTO and they are required to maintain the confidentiality of your information. For more information about our Privacy Policy, visit our website www.cto.int.