

Numbering

17 - 21 August 2009
Sandton, South Africa



COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

www.cto.int

Register by
17th July 2009
for a 10% discount!

Overview

A one-week course that will develop necessary skills transfer for officials working with Numbering Plans, Regulations including Numbering Conventions, and the change from "geographic heavy to non-geographic" numbering.

The course will cover global standards and harmonisation initiatives on numbering, national and regional numbering schemes, the changing technological environment and the impact of convergence on numbering, and numbering-related policy and regulatory issues that need to be addressed to stimulate effective competition in the telecommunications marketplace.

It will cover the most important aspects of:

- Numbering in context
- National and regional numbering systems
- Numbering and creating a framework for effective competition
- Convergence and numbering
- Policy, regulation and numbering



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Tel: +44 (0) 208 600 3800 **Fax:** +44 (0) 870 0345 626 **Email:** programmes@cto.int

Course programme may change due to unforeseen circumstances

Learning outcomes

The successful participant will be able to:

- Determine the key attributes of telecom numbering systems
- Explain the most important aspects of coherent national and regional numbering plans
- Describe the essential elements of a numbering plan for a competitive telecommunications environment from “geographic heavy” to “non-geographic”
- Identify the impact of technology convergence on the numbering system along with future provisions
- Investigate the importance of an effective numbering management system
- Demonstrate ability to develop numbering plans and related regulatory policies at ICASA

Key objectives

- Investigate the key attributes of numbering systems used in the telecommunications environment
- Examine the most important aspects of coherent national and regional numbering plans
- Determine the essential elements of a numbering plan for a competitive telecommunications environment
- Identify the impact that convergence has on the numbering system and identify developments in numbering that will address the needs of telecommunications systems in the future
- Determine the importance of having an effective numbering management system in the telecommunications environment
- Develop numbering plans and related regulatory policies relative to ICASA

Who should attend

- Management and Numbering officials with little or no background on numbering issues.
- Telecommunications personnel with an interest in numbering issues.

Learning environment

Traditional classroom including collaborative learning. Use of presentations, group learning, class exercises, case studies and problem solving.

Pre-requisites

There are no pre-requisites

Course content

Module 1: Numbering in context

- The history of numbering in the telecommunications environment
- Structure of numbering systems in telecommunications environments
- International numbering systems, standards and conventions
- Global harmonisation
- Technical aspects of numbering

Module 2: National and regional numbering systems

- National numbering systems - characteristics and comparison across different jurisdictions
- Regional aspects of numbering
- Different classes of numbers
- Geographic and non-geographic numbering
- Planning of numbering systems
- Restructuring number plans
- Review of the numbering systems used in SA and SADC

Module 3: Numbering and creating a framework for effective competition

- The role of numbering in enhancing or limiting competition in the telecommunications sector
- Competitor number integration
- Number portability - definition, technical aspects, commercial considerations, regulation, pricing and implementation
- Challenges and issues in fixed-mobile number portability
- Carrier selection and pre-selection - definition, technical aspects, commercial considerations, regulation, pricing and implementation
- Numbering for effective competition

Course content

Module 4: Convergence and numbering

- Convergence - an overview
- The impact of convergence on telecommunications
- Numbering in a converged environment
- Internet addressing and naming
- Numbering for IP telephony
- ENUM and similar systems

Module 5: Policy, regulation and numbering

- Numbers as a scarce resource
- Policy implications of different types of numbering schema
- Regulation of the numbering regime
- Responsibilities of the regulator
- Allocation and ownership of numbers
- Commercial aspects of numbering - costing, ownership, management responsibility, recycling
- Policy objectives and drivers
- Key issues that regulators have to address
- Key issues that operators have to address
- International case studies and global best practices

Course leader



Christie Christelis

Christie Christelis is a senior associate at Alliances Consulting Group Inc. with over 20 years of international experience in ICT: convergence technologies, wireless and mobile technologies, internet, broadcast interactive TV, IPTV, VoIP, satellite communications, fixed line and fixed wireless technologies.

He has extensive experience in regulatory capacity building to address newly liberalised telecommunications and broadcasting environments.

Hosted by:

**Independent Communications Authority
of South Africa (ICASA)**

In partnership with:

Alliances Consulting Inc.

About the CTO

The Commonwealth Telecommunications Organisation (CTO) is an international development partnership between Commonwealth and non-Commonwealth governments, business and civil society organisations.

About the programme for development and training (PDT)

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.

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

Tel: +44 (0) 208 600 3800
Fax: +44 (0) 870 034 5626
Email: programmes@cto.int

See more information
on our website

www.cto.int

Registration form

Course: Numbering
17 - 21 August 2009. Sandton, South Africa.

Course ID: 6513

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

Title 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"/> £701	<input type="checkbox"/> 10%	<input type="checkbox"/> 10%
Other CTO members	<input type="checkbox"/> £701	<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 payments to: Coutts Co.
440 Strand, London, WC2R 0QS, UK
A/C Name: CTO; A/C Number 083675071
Reference: GB72COUT18000208367507
Sort Code: 18-00-02; Swift Code: COUT GB22

  (tick as appropriate)

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

Card number

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

Date Name Signature

* two or more delegates

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 affairs
- 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

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4 SIMPLE WAYS TO REGISTER

 Fill in and fax this form back to
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 Call the programme team at
+44 208 600 3800

 Email the programme team at
register@cto.int

 By post to
**CTO, 64-66, Glenthorne Road,
London W6 0LR UK**

NEED HELP?

**Call us now on +44 208 600 3800
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 cancellation/withdrawal. 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

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