Costing and Pricing Infrastructure Access

Rabat, MOROCCO

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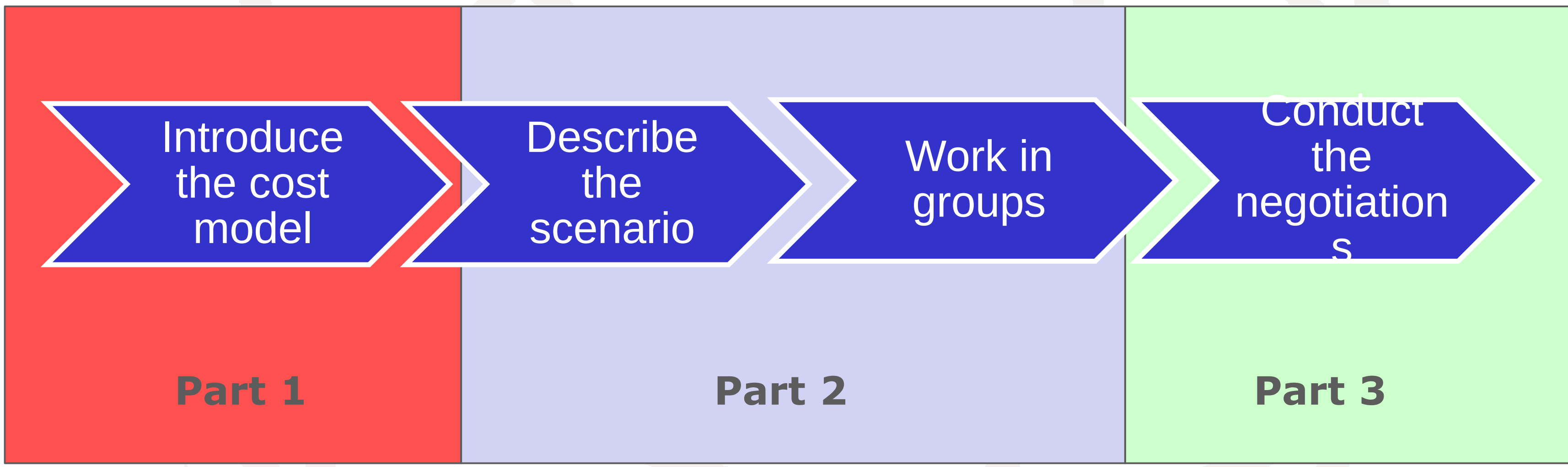
Session 3:
Practical exercise 1: costing and pricing fixed infrastructure access using NGA cost model

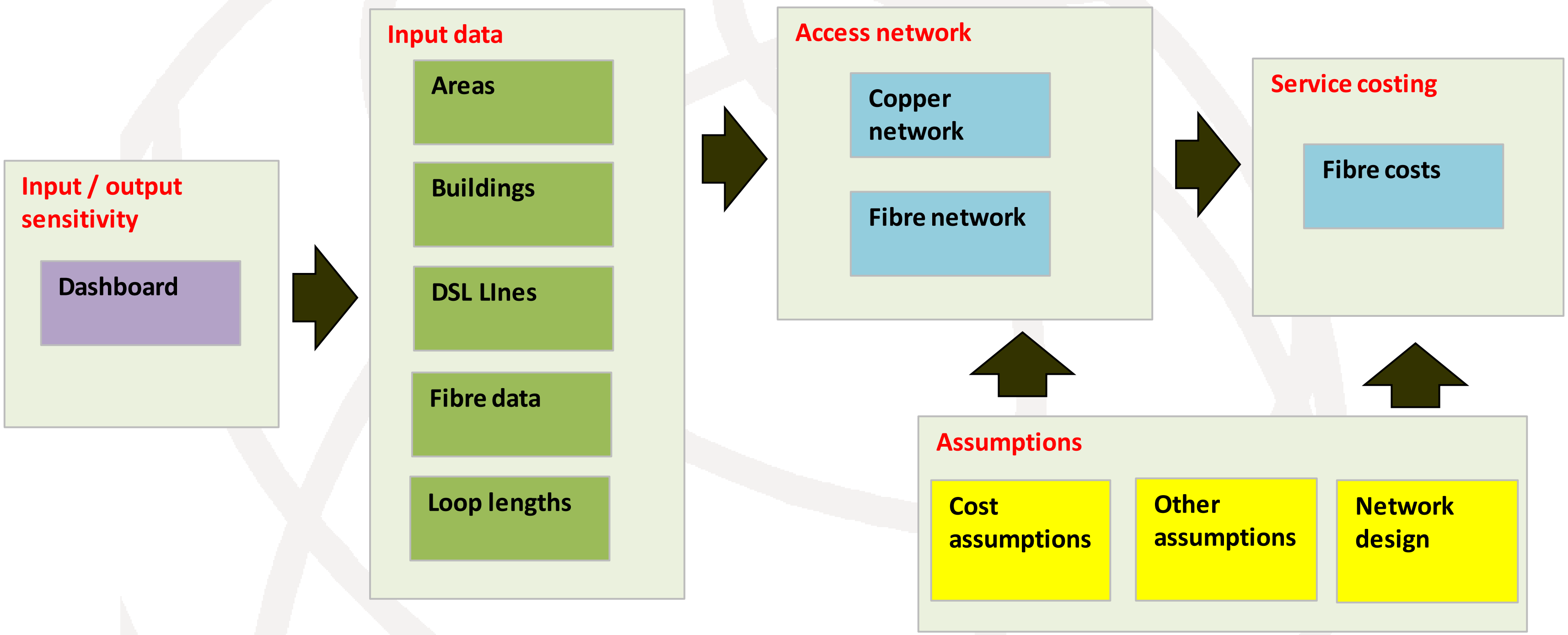
Agenda

Aims and objectives for these sessions



The ITU's Next Generation Access Training Cost Model

The ITU LRIC access network training model



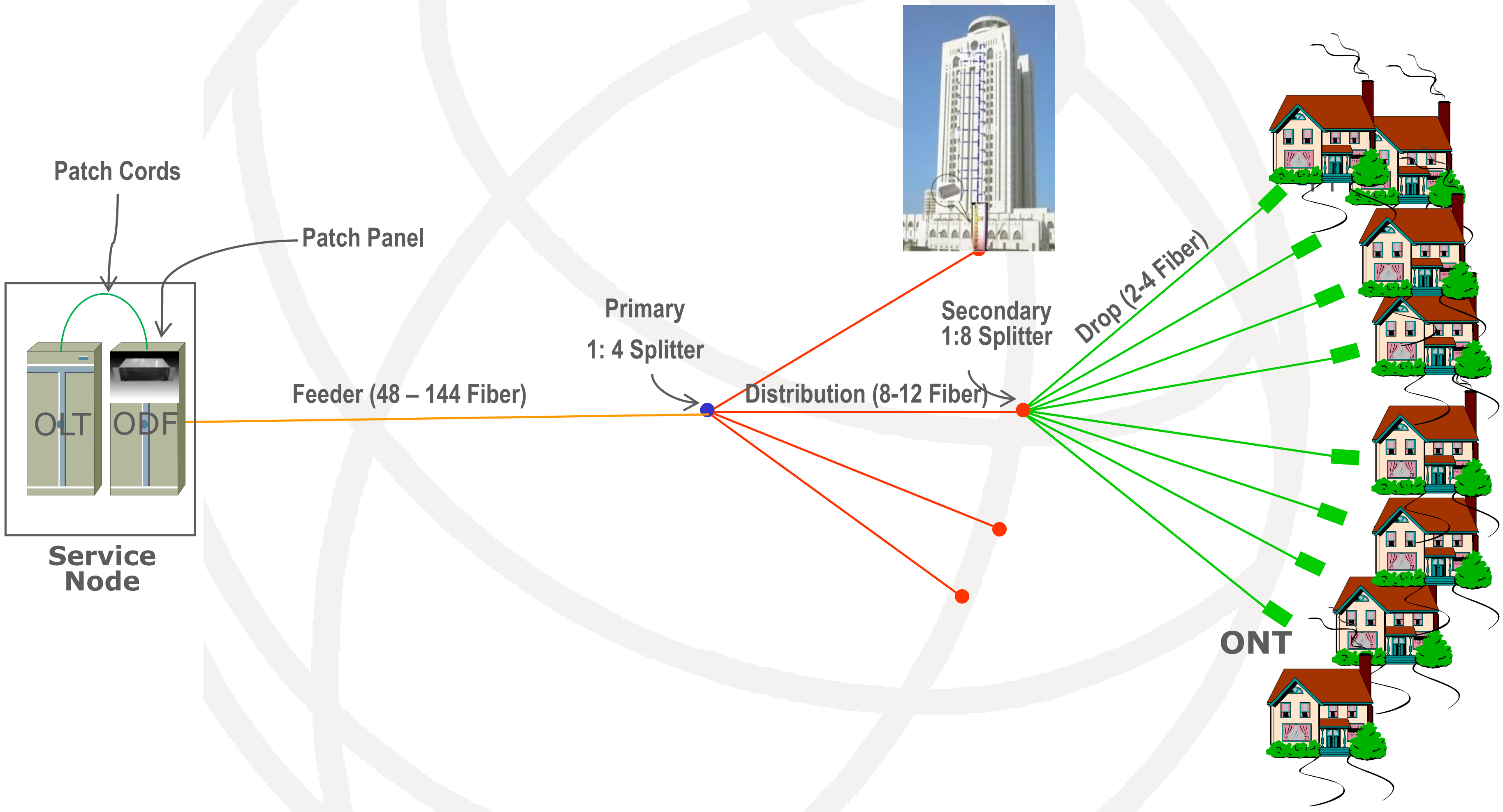
Key - worksheets

- Summary sheets
- Assumptions sheets
- Input data sheets
- Primary calculation sheets
- Secondary calculation sheets

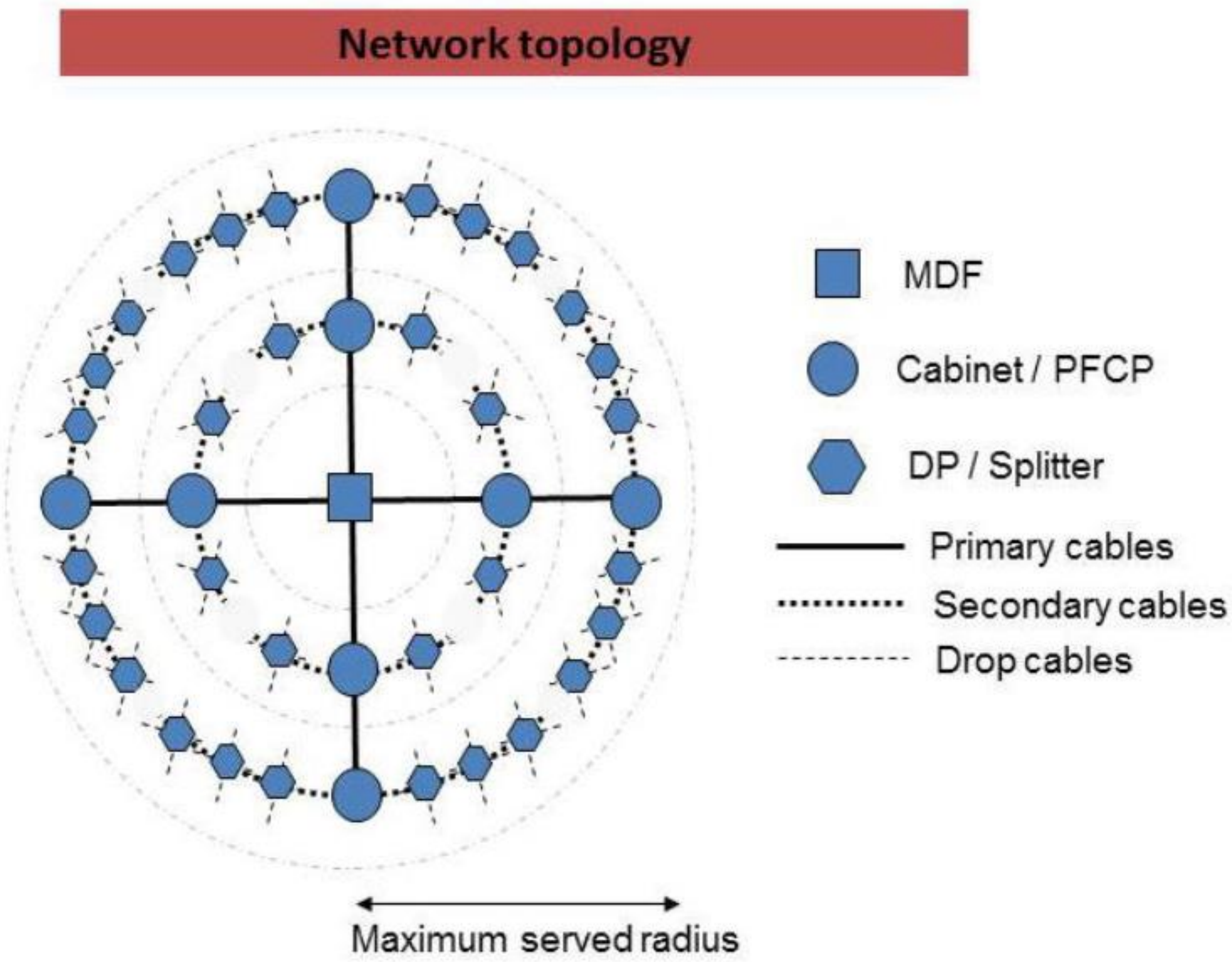
Key - cells

- Input data
- Input assumptions
- Calculation cells
- Model outputs
- Manually updated cells

Network Topology – GPON

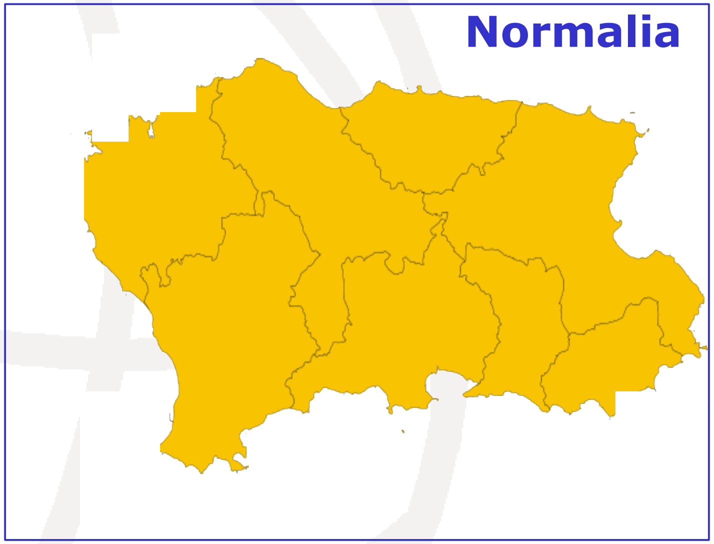


The theoretical access network design



Introducing Normalia

- This practical exercise concerns the fictitious country of Normalia.
- Normalia is a typical ("normal") country with regulatory challenges similar to those in your country.
- The details required for each practical exercise are presented in the slides / handouts.



Telecoms in Normalia

Regulator - TRAN

(Telecom Regulatory Authority of Normalia)

Fixed Telecoms

- 4m subscribers
- Telecom (75%)
- Newtel (25%)

Mobile Telecoms

- 10m subscribers
- Telecom (60%)
- Normcell (40%)

Content and service providers

(various including **Cloud;** an ambitious entrant providing digital TV services)

Broadband service negotiations: Cloud & Telecom

Cloud's confidential proposal

- Cloud has approached Telecom with the opportunity of a deal regarding the provision of its digital TV content.
- It has acquired the rights for key sports fixtures (including cricket, baseball and football) in Normalia and wishes to secure access to customers.
- Cloud is seeking a "substantial" up-front payment plus a monthly charge per subscriber for Cloud's digital TV service.
- It has approached Telecom as the pre-eminent supplier in the market and asked for its best offer. If a sufficiently attractive price is offered Cloud is willing to sign an exclusive deal with Telecom.

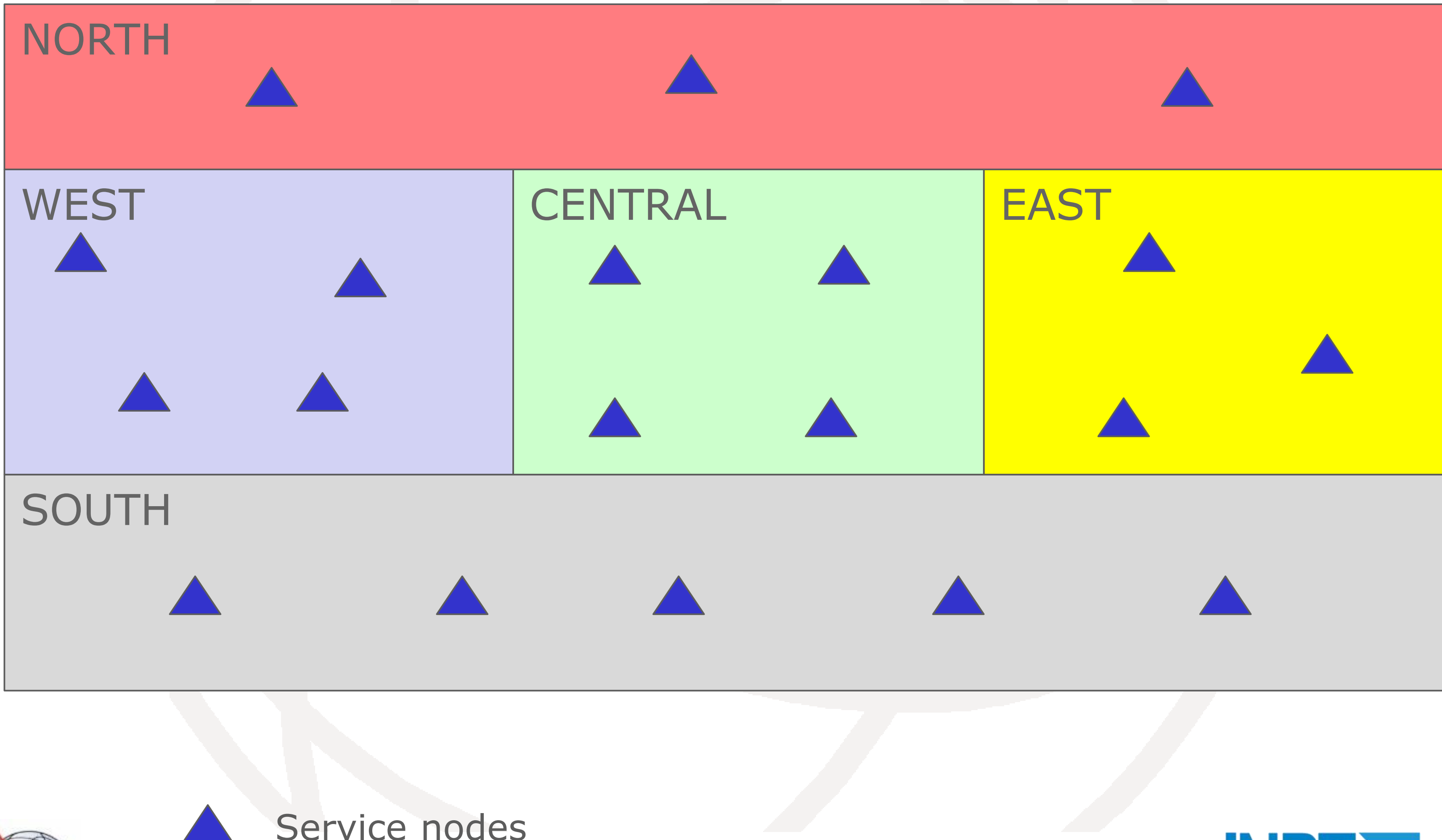
Relevant information in the public domain - Cloud

- Cloud is a new company established by a local businessman (50% of shares) and a US venture capital firm (50%).
- It has been reported in the press that they paid $240m for the exclusive rights to certain sports coverage in Normalia for a period of 2 years, with an option to extend for a further 2 years.
- Analysts have reacted favorably to the deal but warn that Cloud needs to obtain “eyeballs” quickly if it is to obtain an acceptable Return on Capital Employed (ROCE) and cover estimated monthly operating costs of $1m.

Relevant information in the public domain - Telecom

- Telecom's latest public information report claimed that it has 3m fixed subscribers of which 1.5m have broadband (DSL).
- Telecom has recently announced a plan to invest $450m in an all-fibre network (AFN) that will reduce the number of network nodes from 53 to 19.
- The AFN will be the platform for all future broadband services, providing higher access speeds and greater service reliability.
- Telecom market research suggests that DSL customers will pay on average an additional $15 per month for fibre access.

Topology of the Telecom's new fibre network



Cloud’s market research

- To kick-off the negotiations Cloud has conducted some market research that it has also provided (confidentially) to Telecom in advance of the negotiations.
- This research suggests that at a price of $12 per month:
  - 15% of existing DSL customers would take up Cloud’s services
  - This rises to 35% for fibre customers - the enhanced access makes Cloud’s services much more attractive.
- Cloud proposes that Telecom bills the customers and then pays a wholesale charge to Cloud for the provision of its Digital TV services.

What happens next?

- The parties have appointed negotiators who have been tasked with preparing negotiating positions based on instructions from their Boards.
- A **confidential** data sheet will be provided to each team containing further information to assist in the establishment of these proposals.
- It has been agreed that a maximum of **two** meetings will be held between the parties:
  - First, they will meet to understand each other's positions and to see in broad terms if a deal can be done.
  - Second, they should prepare a "best offer" (Telecom) and "lowest acceptable offer" (Cloud) before meeting again to see if an agreement can be reached.

Format of the offer

	Cloud (minimum)	Telecom (maximum)
Up-front investment ($m)	A	B
Monthly fees per Cloud subscriber ($)	x	y

Available cost modelling tool

- The parties have discovered a network cost modelling tool that they believe might help their negotiations.
- This tool is the ITU Next Generation Access Network Training Cost Model and is available as an Excel file for both parties to use.
- This model should be used to determine:
  - The number of fibre access lines that will be deployed by Telecom
  - The number of potential Cloud customers
  - The annual costs per site passed and per site connected.
- The parties have agreed that they will work on the assumption of instantaneous network build and customer acquisition.

Conduct of the negotiations

The negotiation process

Prepare negotiating positions

↓

Conduct first round negotiation

↓

Reappraise the situation

↓

Conduct second round negotiations

↓

Deal or No deal?

Possible outcome

Some deals that work for Telecom

	Option 1	Option 2
Up-front investment ($m)	60	100
Fees per Cloud subscriber ($ pm)	6	5
Revenue per fibre subscriber ($pa)	182	188
Cost per fibre subscriber ($pa)	181	185

Assumes the key model inputs that have been agreed with Telecom's consultants

Some deals that work for Cloud

	Option 1*	Option 2**
Telecom up-front investment ($m)	60	100
Fees per Cloud subscriber ($ pm)	6	5.25
Revenues over first two years ($m)	63	55
Cost over first two years ($m)	60	52

* But doesn't meet Board requirement of $100m minimum investment

** But only works for Telecom if assuming Cloud's consultants' assumptions in the cost model

Points to note

- It may be possible to reach a deal if Cloud can accept a lower up-front investment from Telecom.
- However, the negotiators are not authorised to come up with such a deal at this stage.
- The key to success is increasing customer up-take of fibre:
  - Might Cloud help to transition more customers from voice-only to fibre (leapfrogging DSL)?
  - This is speculative and has not been taken into account within the modelling.
- After receiving new instructions from their Boards the negotiators might still succeed … but Cloud is tempted to consider other options (see Practical Exercise 2).