

# *Meeting on Regulatory Issues Related to the Deployment of Telecommunications Networks in New Property Developments*

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- **Agenda:**

- **Introduction** by Mr. Alan Horne, General Director, TRA Bahrain
- **Presentation of the findings of the Study** on “Regulatory issues related to the deployment of telecommunications networks in new property developments”, Juconomy Consulting AG (Dr. Ernst-Olav Ruhle, Prof. Dr. Fabian Schuster, DI Wolfgang Reichl)
- **Presentation of the envisaged future Guidelines of TRA**, Mr. Tomas Lamanauskas, Deputy General Director, TRA Bahrain
- **Discussion**
- **Lunch**



# *Telecommunications in New Developments*

Outline of the future Guidelines



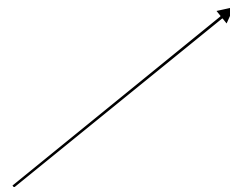
- Defining New Developments
  - TRA's Objective
  - Background
    - Competition, Choice and Investment Considerations
  - Policy and Strategy
    - Role of Developers
    - Open Competition
  - Implementation
    - Economic
    - Technical
  - Connecting to New Developments
  - Further Actions
-

- Predominantly private new build, where telecommunications services are yet to be provided
  - An area, single buildings with more than one accommodation unit or cluster of buildings built for the permanent use by its occupants
    - » Including, high-rise buildings, new industrial zones, new cities etc.
      - To some of them the policy applies *mutatis mutandis*
  - Also applies to recent developments, where competition in telecommunications services has not yet developed
  - Excludes small single private (residential) houses as well as buildings (such as hotels), which are not permanently used by the same tenants and where the temporary tenant does not enter into a contract for the provision of access to telecommunications networks and services
    - » Some proposed technical regulation may still apply
  - Generally applies to newly developed new public developments as well
    - » E.g., Northern Bahrain New Town
  - Consultation will specifically request views on the definition

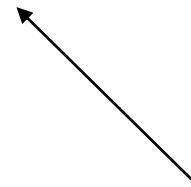
Clarity of regulatory treatment



**Optimum  
Regulatory  
Strategy**



Long-term  
consumer choice  
and competitive  
communications



Incentives to invest  
into state-of-the-art  
networks and  
services

Open Competition



Mitigation of investment risks through increased role of developers

Minimum required intervention and pragmatism with regard to resources of TRA

## *Promoting Multiple Investment and Competition*

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- Competition at the entry level
  - Opportunity for the investment to be contestable such that all the operators are on an equal footing and can undertake the investment. Multiple networks may emerge
- Continuous protection of competition – in case of market failure
  - Once a network is deployed, it may exhibit characteristics of an enduring economic bottleneck requiring appropriate regulatory treatment to ensure choice for consumers
- Re-monopolisation on local level should be avoided
  - Consumer choice should be protected

## *Promoting Multiple Investment and Competition*

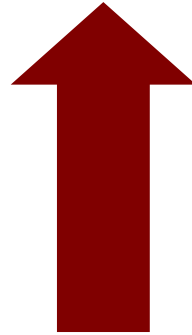
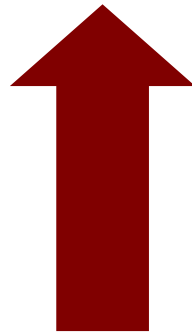
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- It is important to take into account:
  - Need of significant investment in new developments to offer state-of-the-art telecommunications services at the same time facing...
    - » Fibre-to-the-home - € 500 – 2000 per household
  - ...Uncertain demand. Demand risk can have different profile and magnitude depending on the nature of the development
    - » Operators expect only 40% real occupancy of new developments (incl. speculative buy)
    - » “Second home” issue
    - » Possibly long timeframe of progressive development
    - » Uncertainty about what services inhabitants will really need and what penetration can be achieved

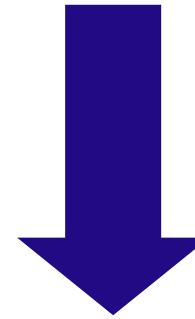
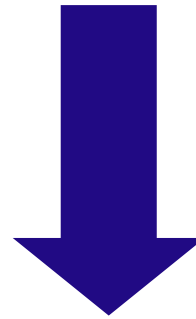
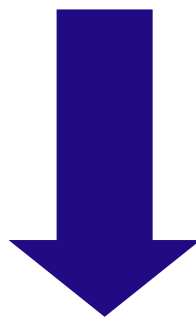


## *Investment Incentives at the Point of Entry*

Clear and Predictable Regulatory Framework     
 **Possibility to lower entry (“sunk”) costs**     
 ~~Guarantees of Less Competition~~



## **Investment Incentives**

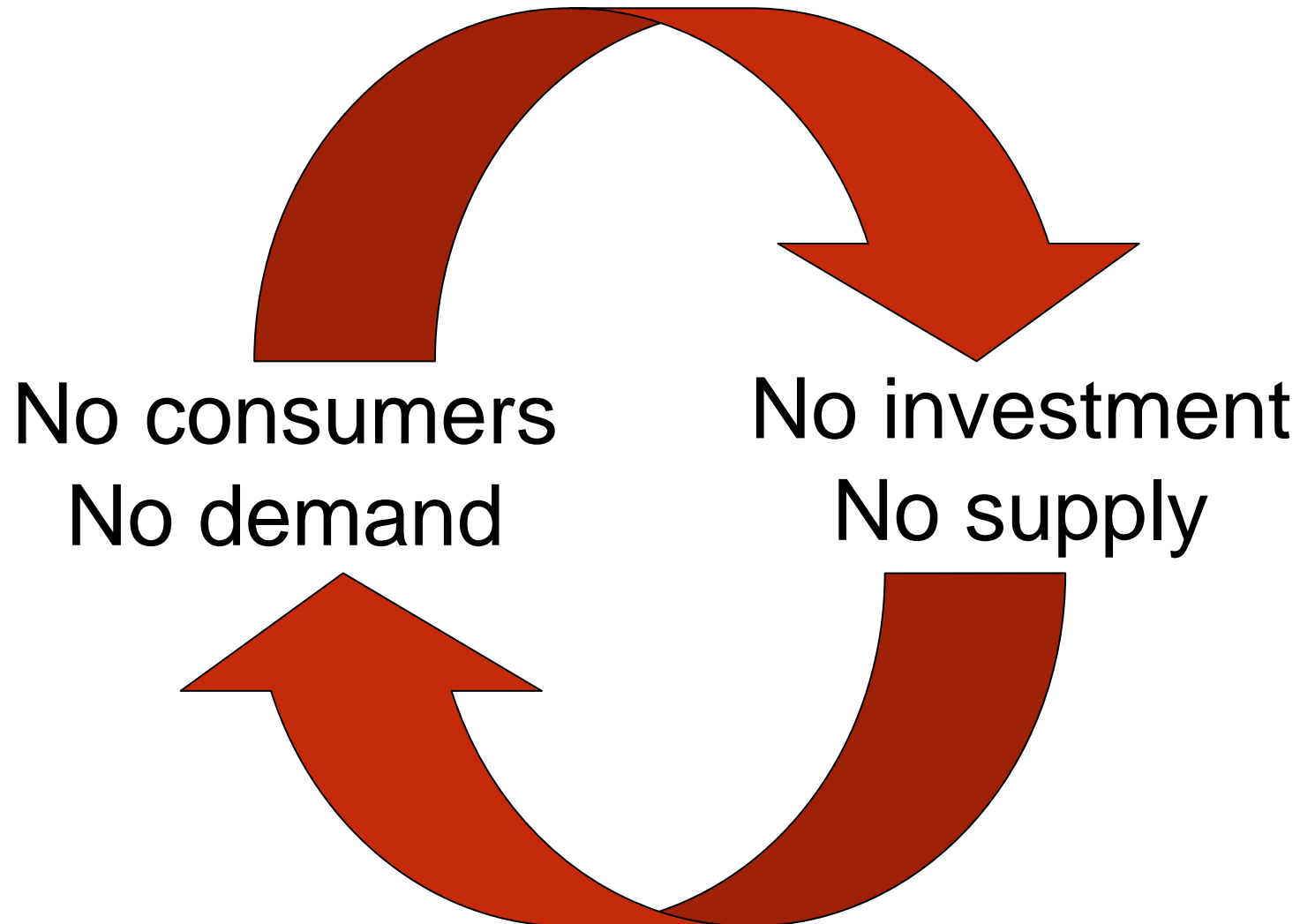


Regulatory Risk

Technology and Cost Risk

**Demand Risk**

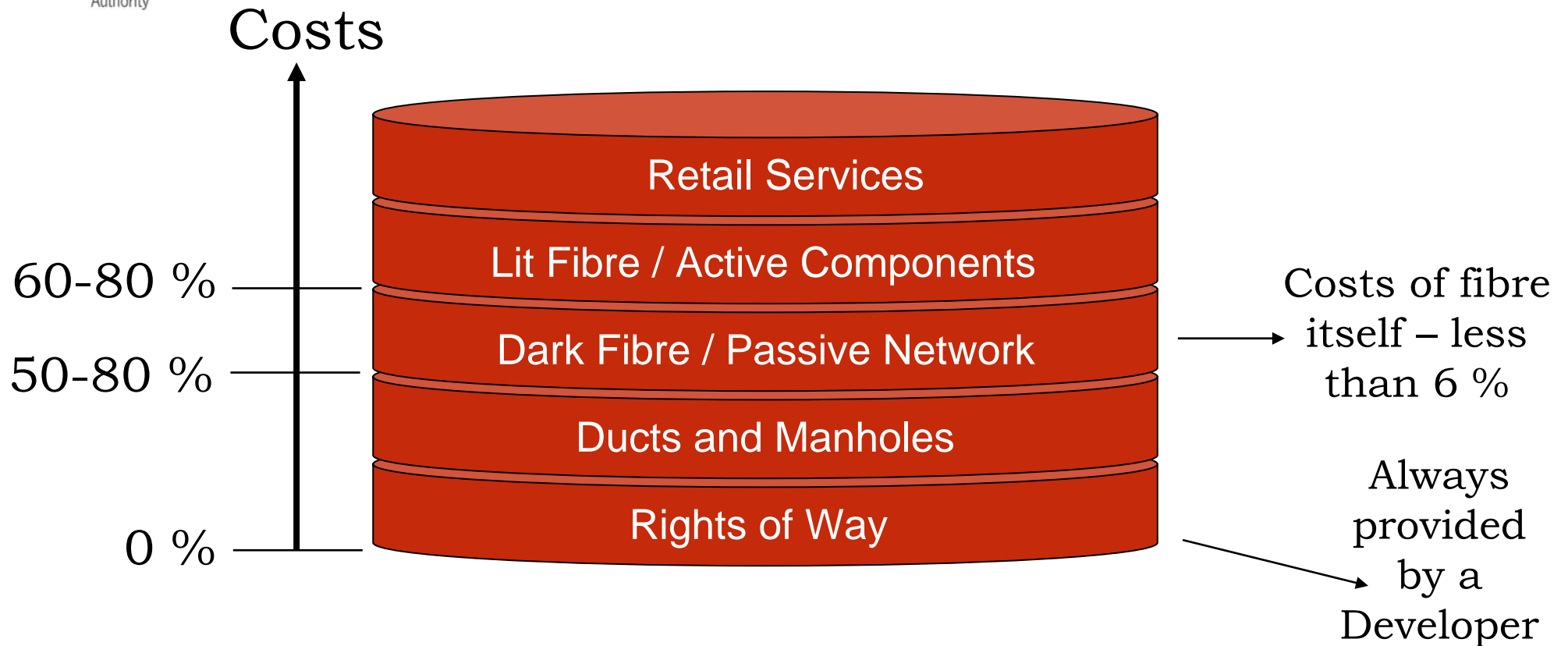
Uncertainty re: Accessibility to ND



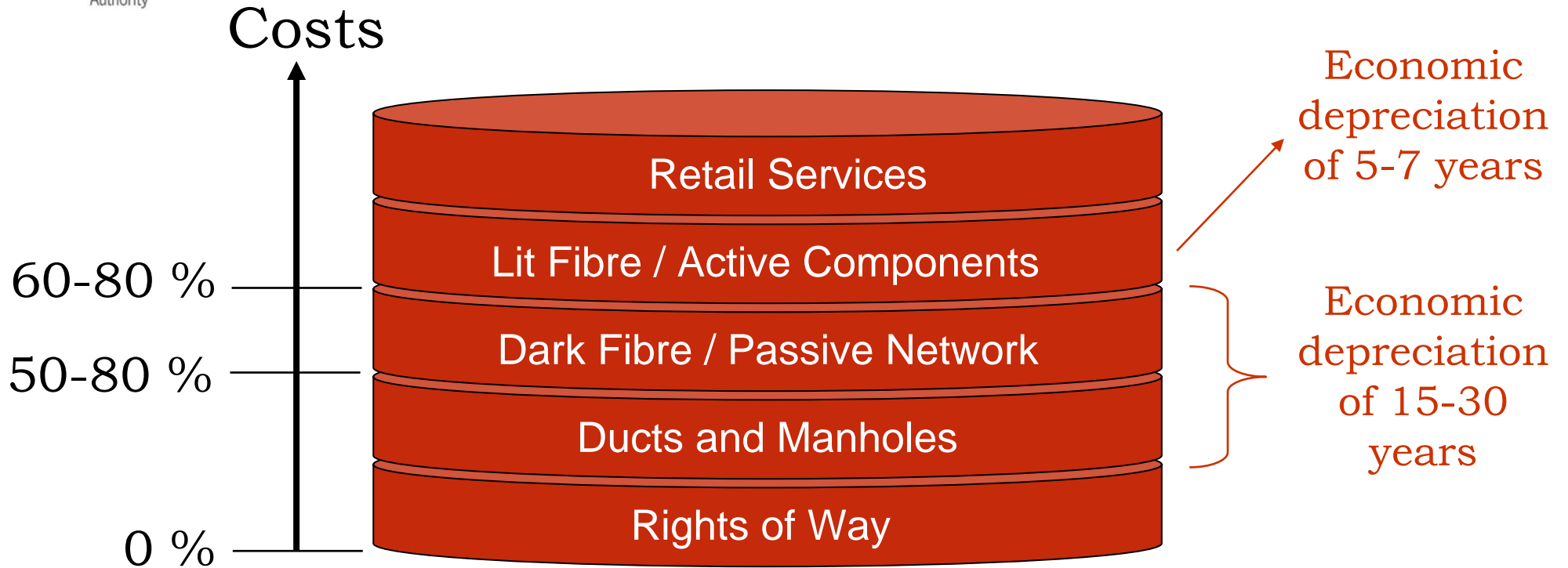


More consumers  
More demand

More investment  
More supply

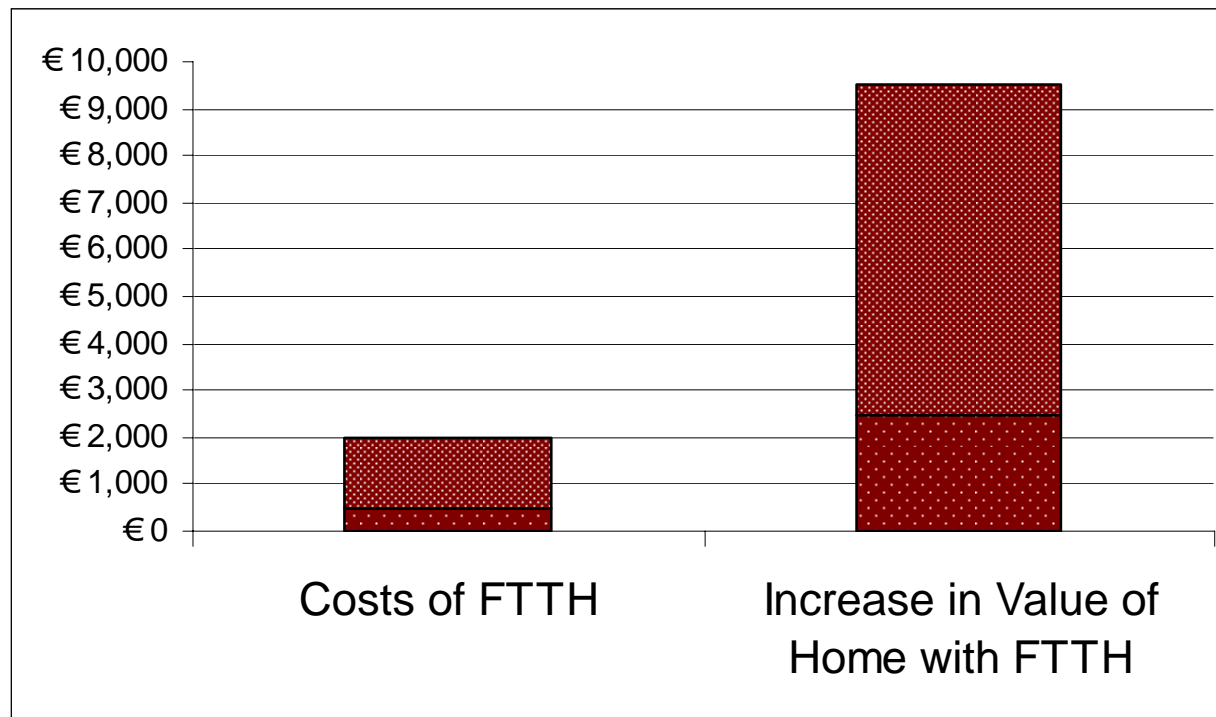


Operators will be asked to share their views on correctness of estimates

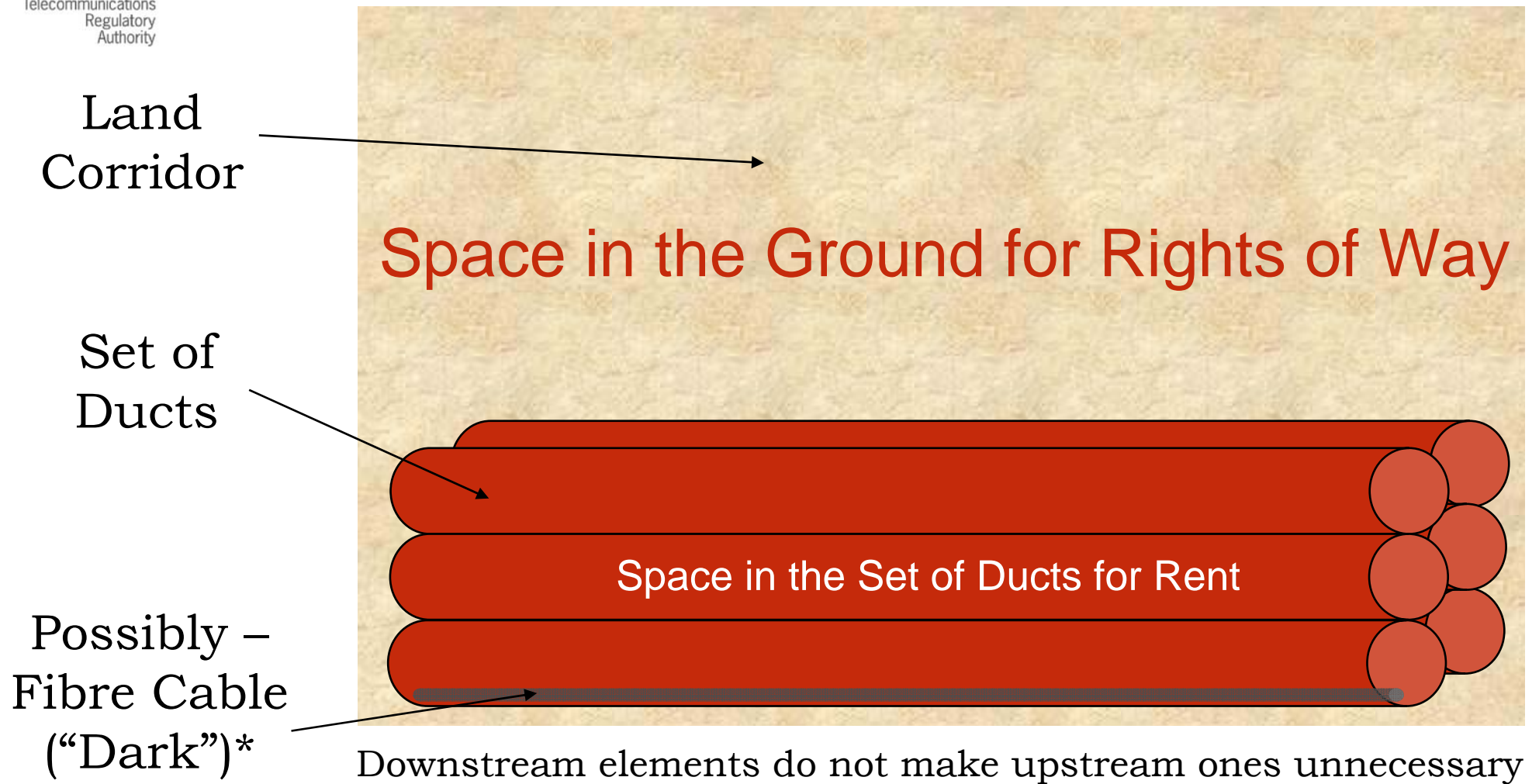


Operators will be asked to share their views on correctness of estimates

- Understand that their contribution might be necessary to achieve satisfactory deployment of state-of-the-art telecommunications networks
  - In order to overcome investment risks (in particular - demand risk, and also – cost risk)
  - To increase value of property
    - » By more than the investment needed (comparison of ranges “from-to” in the graph\*)



- Expected contribution – enabling competitive telecommunications networks
  - Deployment of open duct network
  - Giving due consideration to the deployment of an open “home-run” fibre network\* (“dark”)
    - » More guarantees that tenants will be connected as soon as they come
    - » Depending on demand patterns
      - E.g., if it is expected that connectivity will be needed by early buyers but demand is not certain enough
    - » Does not mean that opportunities for others should/could be closed
    - » TRA will specifically seek views on this issue during the consultation
  - Contribution would add only marginal costs on top of the total costs of new development
    - » Especially if deployment of infrastructure is shared with other utilities and general infrastructure works
  - “Lit” fibre would mean necessary licensing and continuous involvement of the developer to upgrade equipment etc.

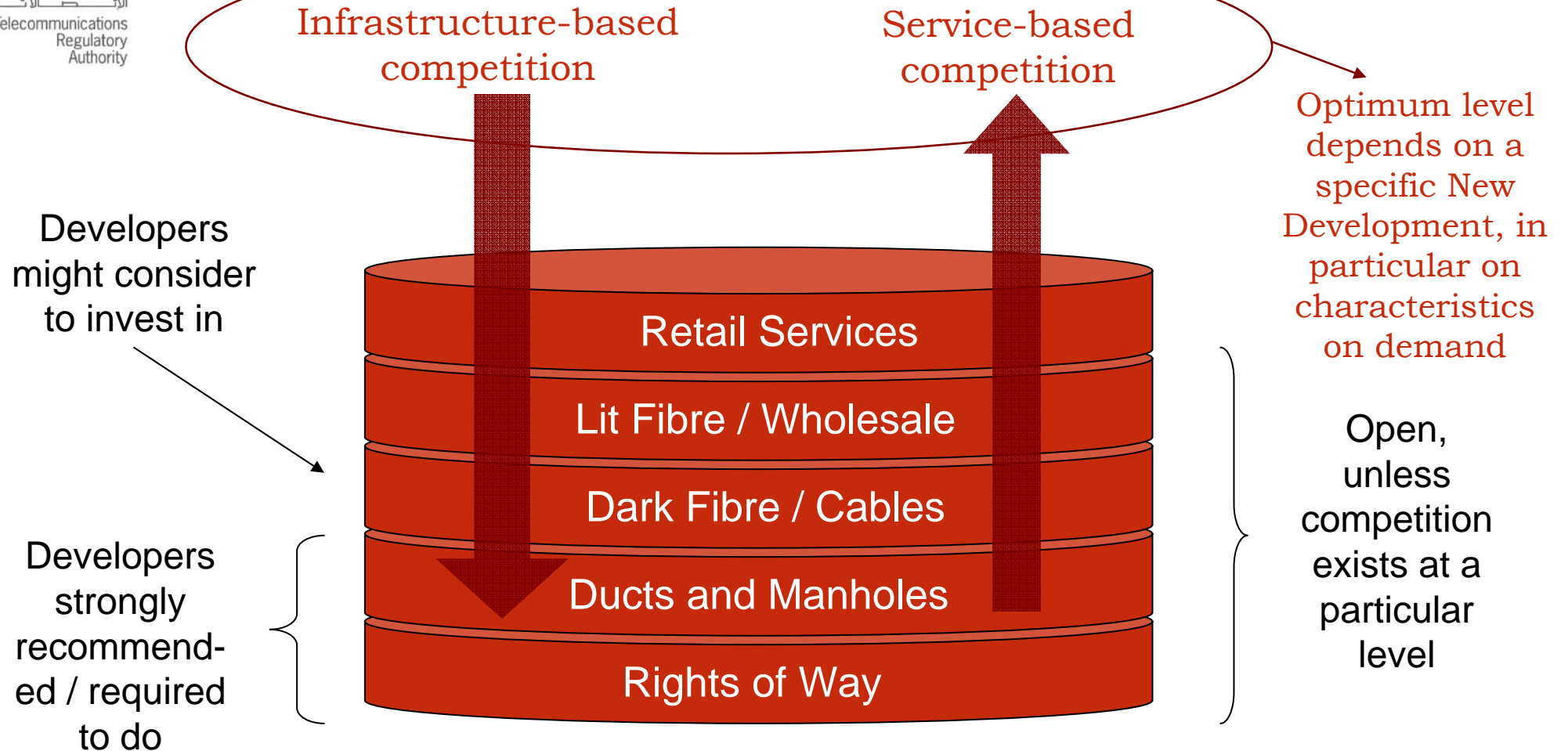


\* Subject to the conclusions of the TRA’s final position.



- No regulatory holidays or exclusive rights
  - Users shall have a right to choose
  - Fair and effective competition shall be protected
    - » Sec. 3(b) of the Telecommunications Law
  - Exclusivity could generally be considered anti-competitive
  - Arrangements that prevent or restrict fair and non-discriminatory access to developments, including buildings - anti-competitive
    - » Sec. 65 of the Telecommunications Law
  - Furthermore, exclusivity:
    - » Would not guarantee sufficient incentives for investment
    - » Is risky for developer as is “all-eggs-in-one-basket” strategy

- Opening of the network at the bottleneck layer – regardless who (developer or telecoms operator) deploys it
  - Wholesale products (right of use) if “dark” or “lit” fibre is available
    - » Access to “dark” fibre even if “lit” is there
      - if technologically feasible
    - » Also applicable to other technologies
  - Access to ducts
  - Rights-of-way
  - Spare ducts for possible additional future competition shall be available in any case
    - » Regardless who deploys them
    - » This also helps to minimise need for later opening of the roads
  - By the way – open network provision could constitute a good business case, delivering guaranteed returns



Views will specifically be sought on the optimum level of regulation / encouragement

- No routine “carving out” of new developments from the existing national dominance or SMP obligations
  - Level playing field achieved via symmetrical obligations
    - » See further
  - SMP obligations apply to “the same” services as elsewhere
  - Could be done on case-by-case basis if a clear case for it is demonstrated
- Individual regulatory/enforcement actions in case of “market failure” only
  - I.e. concerned parties not able to agree on access conditions
  - Via enforcement of license conditions, as well as ex-ante and ex-post measures

- Symmetrical “Open Network” obligations
  - On everyone who has network infrastructure in the new development
    - » Including ducts and dark fibre (and other technologies)
    - » If there is only one infrastructure – obligations apply clearly and unconditionally
    - » If there is more than one infrastructure – if dominant
  - Include publishing non-discriminatory and reasonable terms and conditions for access
  - Safeguards against price-squeeze in case of integrated operator
  - Access to the new developments, including buildings, as well as to roofs, telecommunications rooms and internal cabling in the buildings should be granted on non-discriminatory, fair and reasonable manner
- Possibility to additionally use asymmetric opening of the market remains if symmetric insufficient
  - Via the route of normal dominance determination and obligations of Sec. 57 of the Law

- Symmetrical “Open Network” obligations
  - Implemented via
    - » Licensing Regime with regard to licensees
      - If necessary (in particular during the transition period) supplement by enforcement through Sec. 65 of the Law and possibility for obligations under the Sec. 57 of the Law
    - » Sec. 61 and 65 of the Law for others
      - Including access to “dark” fibre (and other technologies)
    - » Conditions through CPU and Municipalities
  - If required, costs models established by
    - » Ducts
    - » Dark fiber
    - » Bitstream over the lit fiber

- Possibility to deploy nation-wide wireless networks ensured
  - If necessary through the powers of Sec. 61 of the Telecommunications Law
- Granting rights-of-way without any exclusivities
- Requirement to ensure sufficient amount of spare ducts
  - Infrastructure deployment guidelines
- Introduction of specific approval requirements in the Municipal and CPU approval system
  - At least deployment of adequate ducts and manholes
  - Deployment of adequate internal cabling and other facilities for internal telecommunications networks for buildings together with providing an adequate telecoms room
    - » Including requirements necessary to support wireless networks
  - Requirements for access to a development/building
    - » Access on fair, reasonable and non-discriminatory basis

- Coordination of relations between developers and telecom operators
  - Via Telecommunications Technical Office (TTO)
  - Including:
    - » Publishing information on new developments
      - Access to plans
      - Facilitating better choice for developers and more opportunities for all the market players
    - » Information on space on roof, telecommunications room, other common areas
    - » Information to developers on technical requirements and installation process
    - » Consultation between developers and operators on requirements for access facilities, internal cabling, telecommunications room etc.
- Coordination of telecommunications infrastructure deployment and sharing among telecoms operators
  - Via TTO



- Traditional measures:
  - Wholesale regulation – LLCO
  - Duct sharing
  - Enabling build-out of alternative networks via public rights-of-way
    - » Infrastructure deployment guidelines
    - » Telecommunications technical office

- Position paper on deployment of telecommunications networks in new developments
  - It is intended that after some time (e.g. 5 years) the policy will be evaluated and, if necessary, revised
- Finalization of Infrastructure deployment guidelines
  - Possible transformation into a Regulation at a later stage
- Adoption of planning and building requirements related to telecommunications
  - TRA will submit proposals for the Municipal and CPU procedures
- Revision of licensing obligations
  - Through the process of introduction of the unified licenses
- Proposal for revision of the Law



*Thank You...*

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*Telecommunications Regulatory Authority*

*Kingdom of Bahrain*

*Tel: +973 1752 0000, Fax: +973 1753 2125*

*e-mail: [contact@tra.org.bh](mailto:contact@tra.org.bh)*

*<https://www.tra.org.bh>*