

The Hashemite Kingdom of Jordan



Telecommunications Regulatory Commission (TRC)

**Instructions on Long Run
Incremental top-down Cost
accounting system**

**Issued by TRC Board Decision No. (5-22/2014) dated
(4/12/2014)**

Instructions on Long Run Incremental top-down cost accounting system

TRC Board Decision No. <5-22/2014> Date <4/12/2014>

Article (1) Aim and scope

- a) The TRC Regulatory Decision on the Fixed Broadband Markets Review of 14 July 2010 designated Orange Fixed as Dominant Licensee in the market for Wholesale Physical Network Infrastructure Access and the market for Wholesale Broadband Access. Amongst other obligations, chapter VI points 1.5 and 2.5 of this decision obliged Orange Fixed, with regard to the market for Wholesale Physical Network Infrastructure Access,
1. to charge cost-based prices for Wholesale Physical Network Infrastructure Access and associated facilities and services as well as for Wholesale Broadband Access services, based on Long-Run Incremental Costs (LRIC); and
 2. to establish a suitable top-down cost accounting system based on accounting rules and reporting formats specified by the TRC.
- b) The TRC Regulatory Decision on the Dedicated Capacity Markets Review of 21 December 2010 designated Orange Fixed as Dominant Licensee in the wholesale markets for (1) wholesale terminating segments of Dedicated Capacity up to/including 2 Mbps in Jordan, (2) wholesale terminating segments of Dedicated Capacity above 2 Mbps in Jordan, and (3) wholesale trunk segments of Dedicated Capacity in Jordan. Amongst other obligations, chapter VI point 1.5 of this decision obliged Orange Fixed, with regard to the mentioned markets for Dedicated Capacity
1. to charge cost-based prices, based on Long-Run Incremental Costs (LRIC); and
 2. to establish a suitable top-down cost accounting system based on accounting rules and reporting formats specified by the TRC

- c) TRC may according to this decision decide within Market Review Decisions to apply this decision to other markets and Obligated Licensees.
- d) This Regulatory Decision contains the full specification of the above mentioned obligation and shall come into effect as of the date of its approval by TRC Board of Commissioners.

Article (2) Definitions

The following words and phrases shall have the meanings assigned thereto hereunder, unless the context indicates otherwise. Any words and phrases not defined hereunder shall have the meanings ascribed thereto in the Telecommunications Law and the Regulations issued pursuant thereto.

“Activity based costing” is a cost method that identifies activities in an organization and assigns the cost of each activity with resources to all products and services according to the actual consumption by each activity.

“Asset register” is a listing of information relating to various aspects of an asset portfolio used for accounting purposes.

“Cost accounting system” is a system which enables the determination of costs derived from each service and, within a service, the costs concerning the different forms of service provision and the costs concerning the different stages of the production process including cost models and cost assessments.

“Cost assessment” is the determination of costs for products or services based on a cost model using a set of predefined inputs.

“Cost model” is an electronic calculation tool into which inputs are inserted and which calculates costs based on the inserted inputs using various algorithms.

“Current Cost Accounting (CCA)” is an accounting convention based on current values, where assets are valued and depreciated according to their current replacement cost.

“Dominant Licensee” is a Licensee which has been designated as having a dominant position in a market.

“Equi-proportionate mark-up” is the allocation of the costs to services based on each service’s proportion (share) of the total costs.

“Forward-Looking Long-Run Incremental Cost (FW-LRIC)” is a cost standard commonly used to set regulated prices. It comprises of several elements such as forward-looking incremental cost, where the increment is defined as the total volume of a service, based on a long-run time perspective, i.e. reflecting the costs that a network operator would incur when entering the market in order to provide the services for the future.

“Licensee” is a person who has acquired a License in according with the provisions of the Telecommunications Law.

“Modern Equivalent Asset (MEA)” is a valuation method based on what it would cost to replace an old asset with a new one which is technically state of the art. This asset has the same service capability, allowing for any differences both in the quality of output and in operating costs. For the replacement cost valuation to be appropriate it is not necessary to expect that the asset will actually be replaced.

“Obligated Licensee” is the licensee who has the obligation to provide a top-down cost accounting system as decided in a market review decision by TRC with regard to LRIC models or according to TRC’s Regulatory Decision on the Fixed Broadband Markets Review of July 14 and the TRC Regulatory Decision of 21 December 2010 on the Dedicated Capacity Markets Review.

“Profit & Loss statement” is a financial or accounting statement that indicates how the revenue is transformed into net income. It displays the revenues recognized for a specific period, and the cost and expenses charged against these revenues, including depreciation and amortization of various assets and taxes.

“Telecommunications Law” is the Telecommunications Law No. (13) of 1995 and its amendments.

“Top-down” is the method of modelling costs based on the historic statutory accounts for the Licensee as a starting point.

“TRC” is the Telecommunications Regulatory Commission.

Article (3) General specifications

- a) The Obligated Licensee is obliged to establish a cost accounting system for Wholesale Physical Network Infrastructure Access and associated facilities and services, for Wholesale Broadband Access as well as for Dedicated Capacity wholesale services. The cost accounting system shall include a cost model and cost assessment and shall be based on the rules and principles specified in these instructions.
- b) The cost accounting system must be capable of reporting regulatory financial information to TRC in order to demonstrate full compliance with regulatory obligations. The general financial reporting principles proposed are Relevance, Reliability, Comparability, Materiality, Causality, Objectivity, Transparency and Auditability.
- c) The Obligated Licensee is obliged to provide the cost model as an electronic tool provided in MS Excel:
 - 1. Input fields which can be altered by the user. Any changes to the input fields must be reflected in the output of the cost model.
 - 2. Algorithms used to calculate costs based in the input parameters inserted in the model.
 - 3. Output fields including at a minimum the total costs of the relevant services and costs per unit charged for.
- d) The Obligated Licensee is obliged to provide a sufficient model documentation including a manual. This shall contain the description of the cost model provided and include text, graphs, pictures, diagrams etc. showing how the cost model calculates the costs, definitions of the input and the output of the model, and the stages of the flow of data from being inputs to becoming outputs. When the cost model is updated by the Obligated Licensee, a description of the changes shall be included in the model documentation.
- e) The Obligated Licensee is obliged to provide a cost assessment consisting of a cost assessment based on the cost model. It shall be provided as a text document including graphs, pictures, diagrams etc. providing evidence for all

the inputs used as well as the output of the cost model including the total costs of the assessed services and the cost per charging unit for the assessed services.

- f) The cost assessment shall include information on how all costs have been allocated to all services of the Obligated Licensee. It is not required that the Obligated Licensee provides the cost of services for other services than defined in these instructions, but the cost allocation must provide information on how the costs have been allocated to regulated and non-regulated services.
- g) TRC has the right to require the Obligated Licensee to provide a reconciliation to either the statutory accounts or the accounting separation provided by the Obligated Licensee to TRC.
- h) The cost accounting system shall be based on TSLRIC thereby modelling the costs as:
 - 1. Forward-looking costs, that is the costs that a licensee would incur when building a new network today;
 - 2. Long-run costs, that is considering the time period in which a licensee can realise capital investments (or divestiture of capital) in order to increase (or decrease) its productive capacities and considering all investments as variable costs; and
 - 3. Incremental costs, whereas the increment shall be the provisioning of all the services in the markets for dedicated capacity, wholesale physical infrastructure and wholesale broadband access. Further, the increment is proposed to include not only the wholesale services but also the provisioning of the corresponding retail services.
- i) The Obligated Licensee must model the costs on two stages:
 - 1. Classification of costs: The classification of costs shall be based on the Obligated Licensee's accounts and, where applicable, any separated accounts that may be required in accordance with the pricing regulations. It includes the identification and classification of annual costs from the Obligated Licensee's accounting information, including annual operational expenditures (OPEX) and capital expenditures

(CAPEX), of which the latter have to be annualised. A detailed classification of assets and OPEX into predefined categories shall be performed based on the cause of the cost items specified in the Asset Register and the Profit & Loss Statement. The costs for the network shall be separated from the costs for providing the retail services and common costs. Network costs are then further allocated into the costs of individual network elements and Network Common costs.

2. Calculation of service costs; i.e. the aggregation of network-element costs (along with their re-allocations of "Network common") into service costs through the use of allocation factors (which measure the relative usage of network elements by different services). The types of costs included in this calculation are OPEX and cost of capital. Retail costs are similarly allocated to services, either directly (if the costs are caused by a particular service) or indirectly (if they are shared by multiple services). Finally the common costs of network and retail are allocated across all the services, using Equi-Proportionate Mark-Ups. In a summary statement, the results for OPEX and cost of capital shall be provided.
- j) The Obligated Licensee must establish the top-down model by applying the following steps:
1. Determine homogenous cost categories;
 2. Transform the Asset Register from Historic Cost Accounting into Current Cost Accounting based on the Modern Equivalent Asset methodology;
 3. Determine the depreciation and the cost of capital;
 4. Group cost category by activity and network elements. Thereby, Activity Based Costing (ABC) is to be used as the basis for the allocation stages. Possible exceptions for operational expenditures and common costs are defined in Article 8 a);
 5. Develop cost-volume relationships, whereas the cost driver must be related to the volumes of the input and the overall demand for the service;
 6. Determine service allocation keys, applying these and calculating the costs of each of the services; and

7. Determine mark-ups for common costs and identifying the unit costs for each of the services.

Article (4) Asset valuation, capital maintenance and annualisation of costs

- a) The Obligated Licensee must prepare the cost accounting system based on Historic Cost Accounting (HCA) and Current Cost Accounting (CCA) as cost base, with valuation of the assets according to the modern equivalent asset valuation (MEA), absolute valuation, indexation and the book values.
- b) The cost accounting system must be built to enable the determination of costs based on HCA for certain assets and CCA for other assets.
- c) The Obligated Licensee must prepare the cost accounting system measuring the value of the operator's capital according to the financial capital maintenance (FCM) approach.
- d) The main adjustments to be made under FCM are:
 1. Revaluation of fixed assets: The gross book value of assets is valued to take account of specific price changes in the price of assets and changes in technology.
 2. Supplementary depreciation: The depreciation charge for the period is calculated on the basis of the current asset valuations.
 3. Holding gains/losses: Treatment in terms of profit and loss needs to be further adjusted to take account of holding gains or losses that arise due to the effect of asset-specific price changes on the current cost value of assets and the effect of general inflation on shareholders' funds.
- e) The annualisation of capital expenditures and one-time costs shall be annualised based on the tilted annuity formula.
- f) The cost of capital rate shall be determined by TRC.

Article (5) Networks and services

- a) The Obligated Licensee must model the costs based on a scorched node approach, i.e. based on the presumption that all existing node locations and numbers will be taken as given.
- b) The cost accounting system must provide cost results for all services that are included in the reference offer for the market of Wholesale Physical Network Infrastructure Access, Wholesale Broadband Access and Wholesale Dedicated Capacity.
- c) The Obligated Licensee must provide a cost accounting system which is based on the costs of an efficient network that has the network size and market shares of the Obligated Licensee.

Article (6) Operational expenditures and common costs

- a) The Obligated Licensee must provide a cost accounting system which include operational costs considering:
 - 1. The operational expenditures and the common costs shall be those of an efficient network operator.
 - 2. The operational expenditures and the common costs shall be determined directly or based on an activity based costing methodology if possible, otherwise

The operational costs shall be determined based on mark-ups on direct costs.
- b) TRC has the right to require the Obligated Licensee to provide evidence that the costs determined are consistent with the results from the accounting separation information provided to TRC.
- c) The Obligated Licensee shall calculate the mark-up for common costs as an Equi-proportionate mark-up. The size of the mark-up shall reflect the common costs of an efficient operator and the common costs derived from the accounting of the Obligated Licensee.

Article (7) Procedure

- a) Obligated Licensee is obliged to submit the cost accounting system including the cost model and the cost assessment and eventual other supporting documentation to TRC for the years 2012 to 2015 within three months after the issuance of these instructions. For subsequent years, the Obligated Licensee shall submit updated versions within six months after the year end (31st of December). This shall include the results for the two previous years, forecasts for the current year.
- b) TRC will examine the submitted cost accounting system and will either approve the submission or may require changes, if the submission is not compliant with the requirements set out in these instructions.
- c) TRC may require the Obligated Licensee to answer questions on the submitted cost accounting system documents, to provide access to all relevant accounting documents or to prepare additional supporting documents, whenever this is necessary to examine compliance with regulatory obligations. TRC may require the Obligated Licensee to submit documents or data in electronic form.
- d) When TRC requires changes or additional information, it will set a deadline of one month to submit the amended version or the required information. TRC may set a shorter or longer deadline, if this is adequate considering the amount of work needed to fulfil the request.
- e) In procedures where TRC has to decide on the prices that the Obligated Licensee may charge for Wholesale Physical Network Infrastructure Access and associated facilities and services, TRC shall use the data of the cost accounting system as a basis for its calculations.
- f) As long as the Obligated Licensee has not submitted a cost accounting system which is fully compliant to the requirements set out in these instructions, TRC may use alternative methods to calculate the Obligated Licensee's wholesale tariffs. Thereby, TRC shall predominantly extend the approval of current tariffs or use the prices or costs of operators in other countries, which provide similar services in comparable markets (benchmarking).

Article (8) Publication and Confidentiality

- b) TRC treats the cost accounting system and related information, in particular numerical data about costs, and other undisclosed business issues as confidential.
- c) With regard to descriptive documents about the applied methodologies and principles, the Obligated Licensee shall inform TRC whether such documents contain information that shall be treated as confidential business issues. In such cases, the Obligated Licensee shall also provide a version without confidential information that is suitable for publication.
- d) After TRC has examined the provided cost accounting system as submitted according to these instructions, TRC publishes a statement informing market players that the Obligated Licensee has submitted the cost accounting system and the outcomes of the cost modelling assessments with regard to costs of the services relevant for tariff regulation. TRC also publishes descriptive documents without confidential information as far as necessary to inform market players about the applied principles and methodologies.
- e) In exception of the principle of confidentiality set out here, TRC may publish general costing data directly related to services and products for which the Obligated Licensee is obliged to charge cost-based prices. When TRC applies this exception, it has to take into account the economic and legal interests of the Obligated Licensee versus the interests of other market players and the public interest to ensure fair competition.

Article (9) Records

The Obligated Licensee shall preserve sufficient records to provide an adequate explanation of all information as submitted according to these instructions for a period of four years from the date on which the documents have been delivered to TRC. The records can be kept in electronic or in paper form as adequate.