



Telecommunications Regulatory Authority of Bahrain

**Separation of Batelco: A Report on Asset Allocation, Asset Valuation, Asset Transfer,
Asset Lease Agreements, and Transitional Services Agreements**

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1 BACKGROUND

1. The Fourth National Telecommunication Plan (NTP4)¹ set out policies to support the roll-out of Bahrain's national ultrafast fibre network and promote retail competition in the fixed telecommunications sector. NTP4 set out the Government's vision for a single National Broadband Network ('NBN') that would be the sole supplier of wholesale fixed broadband services, and which would be created by separating the Incumbent Operator, Bahrain Telecommunications Company (Batelco).

“Government considers that a single NBN infrastructure to deliver ultra-fast broadband products and services is preferable and efficient for a country of the size, population distribution and topology of Bahrain. This single network will be owned by a separate legal entity, which shall be legally and functionally separated from the Incumbent Operator, Bahrain Telecommunications Company (Batelco), which will supply wholesale products and services to all licensed operators in the Kingdom on a non-discriminatory basis, and it will be awarded the right to deploy the NBN and to supply these wholesale products and services.” (NTP4, para. 20)

2. Batelco established the separate entity, BNET, which was granted a licence by the Authority in 2019. On 1st June 2021, Batelco and BNET executed the following agreements:
 - The Asset Transfer Agreement;
 - Two Asset Lease Agreements;
 - Seven Transitional Services Agreements;
 - One Data Management Agreement and Policy.
3. This document provides a summary of the following:
 - (a) The Asset Allocation Plan which shows the allocation of Batelco's assets between Batelco and BNET;
 - (b) The methodology used to value those assets for the purpose of transferring them from Batelco to BNET ('the Asset Transfer');
 - (c) The services concerned by the Transitional Services Agreements ('TSA') and Asset Lease Agreements ('ALA') in place between Batelco and BNET, post Asset Transfer;
 - (d) The Data Management Agreement and Policy.

4 THE ASSET ALLOCATION PLAN

4. Annex 1 of this document provides a high-level Asset Allocation Plan.

¹ See:

https://www.tra.org.bh/Media/images/National%20Telecommunications%20Plans/NTP4_EnglishTranslation_May20161.pdf

3 THE METHODOLOGY FOR THE VALUATION OF BNET ASSETS

5. For the purpose of transferring the assets to a legally separated BNET, Batelco commissioned a valuation of the assets as at December 2018. In reviewing the submission, the Authority sought to ensure that, in line with NTP4 (and paragraph 24c in particular), BNET would *“be efficiently resourced to deploy and operate the NBN and associated wholesale products and services”* and that *“all appropriate components of the Incumbent Operator’s wholesale access business”* would *“be transferred to the new entity”*.
6. The Authority had concerns with parts of the Batelco valuation, and a third party consultant (DT Economics) was jointly appointed by Batelco and the Authority to provide an independent view on the contentious issues including a revised valuation for BNET’s assets. The methodology that was ultimately applied to value BNET’s assets is a combination of the methodology used in Batelco’s valuation (those parts that the Authority did not have an issue with) and that recommended by DT Economics in relation to the contentious issues.
7. The methodology described in this document was determined by Batelco’s consultant and DT Economics for the sole purpose of valuing BNET’s assets in the context of the transfer of Batelco’s assets to BNET. The Authority reserves the right to depart from this methodology when determining regulated tariffs for BNET. As highlighted in the Separation Guidelines², a clear demarcation was made between the valuation of BNET assets for the purpose of the asset transfer and the valuation of BNET’s assets for the purpose of setting prices.
8. The methodology applied for the purpose of the asset transfer is the Current Cost Accounting (‘CCA’) methodology. The CCA methodology is widely accepted by regulators around the world. More specifically, the CCA methodology applied to value the assets transferred to BNET is the Depreciated Replacement Cost (‘DRC’).
9. The methodology involved the following steps:
 - (1) Drawing up an asset inventory as at December 2018 (the date at which the valuation exercise was undertaken);
 - (2) Ascertaining the Gross Book Value (‘GBV’) and Net Book Value (‘NBV’) of the assets, as at December 2018;
 - (3) Revaluing the GBV of the assets to determine their Gross Replacement Cost (‘GRC’), as at December 2018;
 - (4) Applying depreciation to the GRC values to determine the final DRC, as at December 2018; and
 - (5) Rolling forward the December 2018 valuation to the date of the Asset Transfer.

² <https://tra-website-prod-01.s3-me-south-1.amazonaws.com/Media/mediafiles/document/Separation%20Guidelines4.pdf>. See e.g., paragraph 13.

3.1 Asset Inventory

10. In a first step, a list of the fixed assets of Batelco was established. The resulting asset inventory was drawn up following a series of verification procedures by Batelco's Consultant. Each asset was then marked as either being allocated to BNET or staying with Batelco.

3.2 Gross and net book values

11. The methodology then ascertained the GBV of the assets, as well their NBV (i.e. after accounting for accumulated depreciation). These values are deemed non-contentious as Batelco is required to prepare regulatory accounts in Historical Cost Accounting ('HCA').

3.3 Revaluing the gross values to determine the GRC

12. This step is a key part of the CCA methodology and consists in revaluing the book values to their replacement costs, in order to determine the GRC of the assets. This was performed using three valuation techniques, depending on the assets:
 - Absolute value;
 - Indexed cost; and
 - Book value, unadjusted.

Absolute value

13. The absolute value of an asset at a particular point in time corresponds to what the asset would cost in the market, if it was to be acquired at that time. Absolute valuation is a standard methodology and is especially practical for those assets for which a market exists in which they can be traded at the time of the valuation. It is also generally recommended for assets for which there is a large difference between their current and purchase value.³
14. Absolute valuation was applied to BNET's land and buildings and accounted for less than 15% of the BNET DRC valuation as at December 2018.

Indexed cost

15. Indexation is a standard methodology, and one of the main methodologies for determining CCA values. Indexation takes historical costs (e.g., the acquisition costs or the absolute value of an asset at a particular point in history) as the starting point and uses indices such as inflation-related or industry standard indices to uplift the historical values to the date of the valuation, in this case December 2018.
18. The BNET valuation relied on local inflation and wage indices as well as industry network cost component indices such as the Telephone Plant Index published by AUS Consultants.
19. Indexed cost valuation accounted for the overwhelming majority of the BNET DRC valuation as at December 2018.

³ International Telecommunication Union, Regulatory Accounting Guide, March 2009

Book value unadjusted

20. Unadjusted book valuation was applied to assets that are small in individual value, were recently acquired, or for which it was challenging to uplift their value to current value using standard methodologies. This is standard in CCA valuation.

21. Book value unadjusted accounted for less than 10% of the BNET DRC valuation as at December 2018.

3.4 Applying Depreciation to the GRC to determine the DRC

22. This step of the methodology applied depreciation to the GRC, to arrive at the final DRC values.

23. In setting depreciation, the methodology used a 'prospective' (as opposed to a 'retrospective')⁴ approach and applied the regulatory asset lives that were in force at each point in time during the life of each asset⁵. In particular:

- "Assets capitalized before 2010 have the financial accounting asset lives applied to calculate the depreciation up to December 2009;
- Assets that were fully depreciated by December 2009 under the financial accounting lives are assumed to remain fully depreciated, and do not contribute to the DRC value;
- Assets that were partially depreciated by December 2009 under the financial accounting lives are assumed to further depreciate from 2010 onwards on a straight-line basis over the remainder of the regulatory asset life applying from 2010; and
- Assets that were capitalized after December 2009 are depreciated over their full regulatory asset lives on a straight-line basis." (source: DT Economics)

24. As a result of the above, no residual value was applied for copper assets. There were also no adjustments for impairment as there was no such evidence, based on a detailed review of the BNET assets.

3.5 Roll forward to the asset transfer date

25. The last step of the methodology involved updating the assets (and their value) between December 2018 and the date of the asset transfer, which was on 1st June 2021. This involves both updating the December 2018 valuations (e.g., accounting for depreciation) and adding the value of assets acquired since then, which serve the purpose of BNET delivering the services in its Reference Offer (e.g., fibre network rollout).

⁴ The 'retrospective' approach would lead to a significantly higher valuation of BNET's assets.

⁵ In 2010, Batelco was instructed by the Authority to change the regulatory useful lives of certain assets, hence 2010 was used as a reference year

3.6 CCA uplift relative to HCA and other comparable countries

26. According to DT Economics, the BNET CCA valuation is in line with CCA valuation in what was considered to be comparable countries (Denmark, New Zealand, Oman, UK, Qatar).
27. According to DT Economics, the BNET DRC values represented an uplift of 27% on BNET's HCA asset values. For comparison, DT Economics reported that uplifts were 29% in New Zealand, and 19% in the UK. DT Economics also estimated that, for Denmark, Oman and Qatar for which the data is not available, the uplifts are between 10% and 30% and therefore in line with the CCA valuation conducted for BNET's assets.

4 TRANSITIONAL SERVICES AGREEMENT, ASSET LEASE AGREEMENT AND DATA MANAGEMENT AGREEMENT AND POLICY

28. The Transitional Services Agreements ('TSA') concern services that Batelco and BNET will provide to each other, until such time that they are able to self-supply the services. The list of TSAs, starting dates and duration are presented in the following table.

TSA	Starting date	Duration
BNET as supplier		
Cyber Security	1 st June 2021	19 months
Physical and Corporate Security	1 st June 2021	12 months
Power & Building	1 st June 2021	12 months
Batelco as supplier		
Procurement (Logistics)	1 st June 2021	3 months
Human Resources	1 st June 2021	1 month (Expired)
Rented properties	1 st June 2021	12 months
Multi Protocol Label Switching (MPLS) network	1 st June 2021	4 months

4.1 Cyber Security

29. The services concerned are as follows (source: "executive summary" in Schedule 1 of the Cyber Security TSA).
1. Cyber Strategy & Planning Service
 2. Cyber security managed services reporting Service
 3. Cyber Security Business Case Review Service
 4. Cyber Security Awareness Service
 5. ISO 27001 Compliance Service

6. Vulnerability Management Service
7. Cyber Security Design Service
8. Cyber Security Implementation Service
9. Cyber Security Administration Service
10. Cyber Monitoring and Analysis Service
11. Cyber Incident Response Service
12. Managed Detection and Response Service
13. Cyber Intel Sharing and Reporting Service

4.2 Physical and corporate security

30. The services concerned are as follow (source: Schedule 1 of the Physical and corporate security TSA)

“Service 1 – Site Security Operations

Service 2 – Security Engineering

Service 3 – Security Incident Management

Service 4 – Security Governance and Assurance

Service 5 – Health and Safety”

4.3 Power & Building

31. The services concerned are as follow (source: Schedule 1 of the Power and Building TSA)

- “Power and Building Operation and Maintenance
- Air Conditioning Systems.
- Fire Fighting Systems.
- Mechanical, Electrical Plumbing Systems.
- Civil Maintenance.
- Standby Power System (DC, UPS, Generator Systems).
- 24/7 Support Services.”

4.4 Procurement (Logistics)

32. The schedule of services to be provided is the following (source: Schedule 1 of the Procurement (Logistics) TSA)

“1. the following Logistics services are included in the scope: - Batelco shall accommodate Bnet inventory with warehouse racks, bins and floor indoor and outdoor spaces compatible with the nature of storage of each type of goods.

- Apply all the health and safety measures in the warehouse to ensure the highest level of security.

- The warehouse is an indoor insulated warehouse, with ventilation, and temperature controlled.

- The Batelco warehouse should be equipped to ensure the safety of Bnet Inventory

- Batelco shall perform the below services as part of the warehousing obligations:

- o unload and receive shipments arriving at the warehouse

- o inspect the quality of the received items and capture the relevant shipment information using wireless handheld units scanner whenever applicable

- o Provide Bnet with a receipt confirmation file for inbound shipments

- o Put away stock into locations and will record the location in the system.

- o Pick and prepare orders for shipping.

- o Create the issuing document to include with the outbound order. The shipping document can include the packing list, invoice (if required), order reference number etc.

- o Load goods to the truck

- o Carry out inventory cycle counts based on a predefined agreed schedule

- o Measure and report KPIs for inbound and outbound shipments

- Batelco shall conduct monthly cycle count and share monthly stock count report based on closing inventory.

- Batelco shall report the stock count report by first week of each month.

- Batelco shall facilitate the physical access to Bnet in the Batelco's warehouse to view, inspect, or make different types of validation, reconciliation or counts.

- Batelco shall apply inspection process for all incoming batches according to Batelco's current operating procedure (not limited to Appendix A) and report any damages within one working day.

- Any damaged items or discrepancy between the delivery note and physical found while receiving the stock from the source of supply, shall be immediately reported to Bnet.
- Physical signed and scanned copies delivery notes for all transactions “inbound, outbound” shall be kept by Batelco side and to be shared with Bnet when asked for...etc
- Batelco shall maintain the necessary equipment to manage Bnet inventory, not limited to: Forklifts, Jacks, trolleys, ladders, smoke detectors, Firefighting System, Sheltered and Insulated roof, 24/7 Security.

2. The following Logistics Services are excluded from the scope:

- Shipping coordination
- Inventory planning
- Procurement of inventory
- Supplier management ”

4.5 Human resources

33. The services concerned are (source: Schedule 1 of the Human Resources TSA):

“1. Compensation and benefits – this function refers to the compensation/salary and other monetary and non-monetary benefits, such as health insurance, that are passed on by Batelco and BNET to their respective employees.

2. Talent Acquisition – this function describes the process of attracting, finding, assessing and hiring all necessary skilled human labour as required to meet the needs of the organization.

3. Learning & development – this function aims to improve group and individual performance by continuously increasing and honing skills and knowledge within the organization. Learning and development forms is a talent management strategy designed to align group and individual goals and performance with the organisation’s overall vision and goals.

4. Career management – this describes the ongoing process of investing time and resources in employees in order to motivate and support them as they explore, plan, and develop their career paths.

5. Organization Development and Manpower Planning – this describes the critical function of enabling the organization to build its capacity and improve its effectiveness and competitiveness by developing, improving, and reinforcing strategies, structures, and processes. It is mainly measured in business outcomes including financial performance, customer satisfaction, and employee engagement.

6. Facilities management (Logistics, Cleaning and Pest Control) – this function includes maintaining all buildings and grounds, overseeing the maintenance

of equipment and supplies, identifying and arranging for all necessary repairs or renovations, and coordinating safety inspections.”

4.6 Rented properties

34. The ‘Rented properties’ TSA concerns exchange buildings that are rented from the market and shared by Batelco and BNET (they are owned by neither party). The TSA is essentially a rent and maintenance cost sharing agreement and concerns 33 Exchanges.

4.7 Multi Protocol Label Switching (MPLS) network

35. The following extract of Schedule 1 of the MPLS TSA describes the services concerned.

Schedule 1 – the Services

During the Term , Batelco will provide operations and maintenance ('O&M') services including all network provisioning, assurance, and managed services to BNET and shall undertake a majority of technical work needed in Batelco's NMPLS infrastructure as to enable BNET to deliver its relevant products and services over the MPLS network. MPLS O&M will frequently review the network to ensure optimal network performance and organizational productivity. The below is an agreed list of services to be provided:

Level 2 MPLS O&M	Description	Operating model
Network Design & Consultation	<ul style="list-style-type: none">• Batelco MPLS O&M has advanced knowledge of networking and security technologies, and are available to assist BNET with designing its services to ensure network functionality and performance.• Network consulting services include design services, general technical guidance and advice, recommended practices, product/service assessments and recommendations, and assistance resolving complex network problems.	Consultation
8x5 Provisioning services	<ul style="list-style-type: none">• Flexibility to meet all needs in all Bahrain locations.• Provision below agreed list of Services:• WLA CCT New OLT• New WBS aggregation	Managed Services
Change Management	<ul style="list-style-type: none">• - Service configuration change/deletion	Managed Services
NMS Service Addition	<ul style="list-style-type: none">• - Adding the provisioned service instance in NMS system for monitoring and reporting purpose.	Managed Services
Network Routine Maintenance	<ul style="list-style-type: none">• Hardware and software installation/configuration.• Monitoring and improving network performance/Level2 Quarterly. - Planning for future network growth/ Quarterly basis.	Managed Services
Fault management	<ul style="list-style-type: none">• Troubleshooting network problems/Level2.	Managed Services
Network Expansions	<ul style="list-style-type: none">• - Providing network development activities related to MPLS expansions needed.	Development

Reporting Requirements: Batelco will to BNET provide a monthly performance reports including GPON uplinks, OLO's & Batelco Trunk Utilization (AGG) as well as utilization and growth of BNET traffic running on Batelco's MPLS network

4.8 Asset Lease Agreements

36. The Asset Lease Agreements ('ALA') cover exchanges that are the property of BNET and leased to Batelco (when it also has a presence in the exchange), and vice versa.

Properties for which Batelco is the Landlord

37. The exchanges concerned are (as per Batelco and BNET's ALA):

BCC (Land and Building)

Diplomat (Land and Building)

Hamala (Land and Building)

RJR (Land and Building)

HID (Land only)

BUD (Land only)

QUD (land only)

Properties for which BNET is the landlord

38. Exchanges concerned are all remaining exchanges, with the exclusion of exchanges covered by the 'rented properties' TSA (i.e. those rented from the market).

4.9 Data Management Agreement and Policy

39. A Data Management Agreement and Policy is also in place between Batelco and BNET, to protect against the misuse (including by taking competitive advantage) of any data accessed by Batelco in the provision of the respective services. Such concerns were mainly in relation to three TSAs (HR, Procurement (Logistics) and MPLS), which are all short-term agreements.

Annex 1

The following is the Asset Allocation Plan submitted by Batelco and BNET and approved by the Authority. It is presented here as submitted by the parties to the Authority.

Asset Allocation Plan

SUMMARY

- All Fiber assets allocated to BNET.
- All Copper and MSAN allocated to BNET.
- All Salmaniya real estate allocated to BNET.
- All owned exchanges real estate and related F&F allocated to BNET except the following;
 - ✦ HML, DIP, BCC, & RJR exchanges - buildings and land retained by Batelco.
 - ✦ HID, BUD, & QUD exchanges - lands retained by Batelco and buildings allocated to BNET

Asset Category

Assets remaining with Batelco

CPE
FIXED NETWORK EQUIPMENT
INTERNATIONAL CABLES
IS (INTERNET SERVICES)
IT - PERSONAL
MOBILE NETWORK EQUIPMENT
PLANT & EQUIPMENT & IT
REAL ESTATE, FIXTURES & FITTINGS
Retail
RETIRED
TRANSMISSION EQUIPMENT (SDH)
TRANSMISSION EQUIPMENT (WDM)
TRANSMISSION EQUIPMENT (WDM/SDH & OTHER)
WIFI

Assets transferred to BNET

ACCESS NETWORK EQUIPMENT
ACCESS NETWORK EQUIPMENT - COPPER
ACCESS NETWORK EQUIPMENT - FIBER CABLE
ACCESS NETWORK EQUIPMENT - GPON
AUC - AMAZON FIBER CABLE
FIXED - GPON
FIXED - MSAN
FIXED NETWORK EQUIPMENT
PLANT & EQUIPMENT & IT
REAL ESTATE, FIXTURES & FITTINGS
TRANSMISSION EQUIPMENT (WDM)