

Separation Guidelines



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority
Mملكة البحرين - Kingdom of Bahrain

Separation of Batelco

Separation Guidelines

6 August 2018

Ref: LAD/0818/198

Purpose: To guide Batelco in its separation process, specifying the Authority's requirements following the Economic Regulatory Framework.

Separation Guidelines

Legal disclaimer

This document contains information and statistics that have been obtained from sources believed to be reliable in regard to the subject matter covered.

This document does not however constitute commercial, legal or other advice however so described. The Telecommunications Regulatory Authority (the “**Authority**”) excludes any warranty and, or liability, expressed or implied, as to the quality, completeness, adequacy and accuracy of the information, statements and statistics contained within this document.

The Authority reserves the right to change and update the information, statements and statistics provided in this document at its discretion and without prior notification and assumes no obligation to update the document on the basis of suggestions, comments and/or queries made by third parties.

The Authority assumes no responsibility for any consequences that may arise in the absence of such changes and/or updates.

To the fullest extent permitted by law, neither the Authority nor any of its officers however so described or agents will assume responsibility and/or liability for any loss or damage, including losses or damages such as loss of goodwill, income, profit or opportunity, or any other claim of third parties, arising from or related to the use of the content of this document.

Separation Guidelines

Table of contents

Table of Contents

1	Introduction.....	4
2	Separation Milestones and Timetable.....	4
4	Asset Allocation Plan.....	6
5	Security Management Plan.....	7
6	Systems Separation Plan.....	8
7	The SE Governance Framework.....	10
8	Organisational Separation Plan.....	11
	Annex 1 - Summary of Batelco Submission Requirements.....	13
	Annex 2 – Project Plan.....	15



Separation Guidelines

1 Introduction

1. This document, the Separation Guidelines (the “**Guidelines**”), is the third in a series of reports and draws on the principles set out in the New Economic Regulatory Framework (the “**Framework**”) to guide Batelco in the establishment of a Separated Entity (“**SE**”) and in the development of the SE’s products and services. Definitions used in the Framework shall also apply to this document, unless the context requires otherwise.
2. This document specifies a number of requirements in relation to the separation of Batelco needed to achieve a model of separation that is in accordance with the aims of the Framework. The Authority expects Batelco to reflect these in its proposed Undertakings.¹
3. For the avoidance of doubt, the Authority expects that Batelco will implement separation by the transfer of staff and assets to the SE from Batelco. The new entity is to be efficiently resourced to deploy and operate the NBN and associated wholesale products and services, as outlined in NTP4². Having regard to the tasks involved in the implementation of separation, the Authority also expects that Batelco’s Undertakings will be accompanied by a number of implementation plans and frameworks that set out how its commitments will be implemented. Batelco is expected to, at a minimum, consider and submit the following materials, which are detailed in this document:
 - a. Separation Milestones and Timetable;
 - b. Asset Allocation Plan;
 - c. Security Management Plan;
 - d. Systems Separation Plan;
 - e. The SE Governance Framework; and
 - f. Organisational Separation Plan.
4. Batelco will be required to submit its Undertakings to the Authority by 6th September 2018.

2 Separation Milestones and Timetable

5. Batelco will be required to submit a detailed implementation timetable with clearly defined separation milestones (together the “**Separation Milestones**”), dependencies and timings in accordance with the deadlines set out in Schedule 4 of the STM and/or the Project Plan Milestones (Annex 2). These Separation Milestones include requirements for the submission of specific documentation and operational milestones relating to:
 - a. The Establishment of the SE (the “**SE Establishment Milestones**”);

¹ For illustration purposes only, the following link contains the Undertakings of BT to the UK regulator Ofcom in 2004: https://www.ofcom.org.uk/data/assets/pdf_file/0020/24509/consolidated.pdf or the separation Undertakings of Telecom New Zealand in 2008: <http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/communications/previous-reviews-and-consultations/telecom-separation/documents-image-library/telecom-separation/telecom-separation-undertakings.pdf>

² Paragraph 24c.

Separation Guidelines

- b. Systems Separation;
 - c. Organisational Separation;
 - d. The SE Business Case;
 - e. Product Roadmaps; and
 - f. Reference Offers.
6. In particular, Batelco should set out the steps it will take during the transitional period to build towards achieving separation.
 7. Where appropriate, Batelco should also include in its implementation timetable interim milestones relating to achieving the required level of separation where it considers additional time is required. By way of example, existing contractual arrangements may restrict the ability of Batelco to legally transfer some maintenance contracts to the SE. In this case, Batelco should set out the milestones to transfer control of contracts to the SE and, where necessary, later milestones to achieving the required level of separation – i.e. when it expects that the current contracts can be replaced with new contracts entered into by the SE.
 8. If at any point Batelco or the SE considers it will not be able to achieve the Separation Milestones to achieve separation as set out in these Guidelines, Batelco should notify the Authority as soon as it becomes aware of any delays, provide an explanation for the reasons for delays and propose a new milestone date. Proposed delays to obtaining full and complete separation for individual assets or contracts should be limited to those specific assets or contracts and not delay the achievement of separation for other assets or contracts. Any proposals for new milestone dates will be subject to the Authority's approval.
 9. Batelco will be required to satisfy the Authority that it has met all relevant milestones in order to progress through the key stages of the separation process. The Authority will be mindful of the practical challenges to ensuring that business support systems (BSS) and operational support systems (OSS) are ready to enable the SE to deliver EOI in assessing Batelco's Commitments. That said, the Authority expects the SE, to the greatest extent practicable, to be in a position to deliver EOI for all wholesale products and services in accordance with relevant project timeframes. For the avoidance of doubt, the Authority will have regard to Batelco's progress against relevant systems separation Commitments in determining whether and when to issue the Fixed Telecommunications Infrastructure Licence to the SE. The Authority will also assess, on an as needs basis, whether any further legal measures are required to safeguard equivalence and enable the SE to commence supply of fibre based wholesale products and services in a timely manner.
 10. The final set of Separation Milestones will be based on those set out in the Project Plan Milestones and Schedule 4 of the STM issued by the Authority on 12 July 2018 and will be binding on Batelco: the Authority will consider appropriate remedies in the event that Batelco fails to meet the milestone dates or is otherwise in breach of the terms of the STM. These include but are not limited to, fines and the appointment of one or more independent consultant(s) to manage and administer aspects of the transition as outlined in the STM.

NMK

Separation Guidelines

4 Asset Allocation Plan

11. The Authority requires that Batelco submit an asset allocation plan to the Authority in accordance with the deadlines set out at Schedule 4 of the STM. This asset allocation plan is expected to include consideration of the following:
 - a. Batelco's proposals for as to whether, and if so how, Batelco will transfer the following assets to the SE:
 - a. Fibre cable;
 - b. Copper wire;
 - c. Duct and poles;
 - d. Active equipment;
 - e. Exchange buildings and cabinets;
 - f. International landing stations and international cable;
 - g. Office accommodation; and
 - h. Other assets.
 - b. In line with the Single Network objective, the Authority expects the SE to, at a minimum, own passive network assets such as exchange buildings, fibre cable, copper wire, and ducts and poles, together with any active equipment solely used to efficiently deliver the proposed wholesale products.
 - c. In order to minimize the potential for discriminatory behavior by Batelco or the SE, the Authority expects the number of assets shared between the SE and the rest of Batelco to be limited to those where it is not economically efficient for the SE to operate separate assets. Any shared assets, with the exception of exchange buildings, will be retained by Batelco and not transferred to the SE. Any proposed asset sharing agreements between the SE and the rest of Batelco, are expected to require the establishment of service agreements between the two entities, which include:
 - a. Transfer prices (if any);
 - b. Personnel sharing (if any);
 - c. Service specifications;
 - d. Provisioning timeframes;
 - e. Standards for fault resolution and repair times;
 - f. Standards and processes for in-life service management; and
 - g. Penalties for breach of the service level agreements ("SLAs").
12. Furthermore, the SE is expected to assess on a regular basis whether it will continue to require use of assets held by the rest of Batelco. Where it is determined that the SE no longer has operational need for the shared assets, the Authority expects to be notified for its approval.
13. The Authority expects that assets will be transferred from Batelco to the SE at their net book value for the purpose of financial reporting. The Authority will issue separate instructions to Batelco/the SE on the appropriate valuation of assets for the purpose of setting economically efficient prices.
14. The criteria for assessing Batelco's proposed allocation of assets will include:

Separation Guidelines

- a. **Delivery of the SE Product and Service Set** – the assets to be owned by the SE should enable it to provide the SE Product and Service Set to all downstream operators.
 - b. **Alignment with EoI** – Any asset allocation should reflect the need to ensure that all aspects of EoI are maintained and that all downstream operators are able to compete on a “level playing field”, thereby promoting service-based competition. In particular, any arrangement should not discriminate against either OLOs or BRE when considering potential access and sharing arrangements.
 - c. **Efficiency** – The Authority expects Batelco to demonstrate that any asset transferred to the SE is required by the SE to enable the SE to provide its licensed services in an efficient manner. The scope of assets transferred should therefore be sufficient for the SE to fulfil its functions but should not involve any assets which the SE does not require to deliver the licensed services.
 - d. **Independence** – In line with EoI, any asset transfer should be made in a manner which enables the SE to make operational and investment decisions in its own commercial interest, independent of other licensed operators, in particular BRE.
 - e. **Security requirements** – Any potential access and sharing arrangements between the SE and the rest of Batelco or OLOs should be consistent with the Security Management Plan.
 - f. **Potential for cross subsidization** – Assets must not be allocated in a way that provides Batelco with an opportunity to cross-subsidise its operations in competitive markets with returns earned in regulated markets.
15. As described in paragraph 7 above, the Authority expects Batelco to propose, where necessary, additional milestones for achieving separation (where legal title of the assets passes to the SE). Where these milestones are different for different asset classes, Batelco should provide an explanation for the additional time required to transfer the specific assets.

5 Security Management Plan

16. The SE will be expected to take into account and accord with relevant industry standards and regulations in designing the security of the Single Network, the SE Product and Service Set and its organisation by specifically considering:
- a. **National security** – the SE will need to ensure that in the operation of the Single Network, all national security obligations are complied with.
 - b. **Asset security** – To address the need to ensure the physical security of the Single Network and its supporting infrastructure, the Authority requires that the SE’s physical security measures encompass both prevention of unauthorised access through the installation of physical security perimeters and entry controls, the monitoring and logging of any access, and protection against environmental threats including fire, floods and other forms of disaster that may affect the facilities.
 - c. **Information security** –The SE will be required to comply with the Critical Telecommunications Infrastructure (“CTI”) risk management regulation. The SE will be responsible for safeguarding a substantial amount of information, encompassing not only data transmitted over the network but also data relating to the Single Network architecture. The Authority requires the SE to ensure that confidentiality and integrity of all data in

Separation Guidelines

transit, accessed or stored across the Single Network or within the SE systems, is maintained.

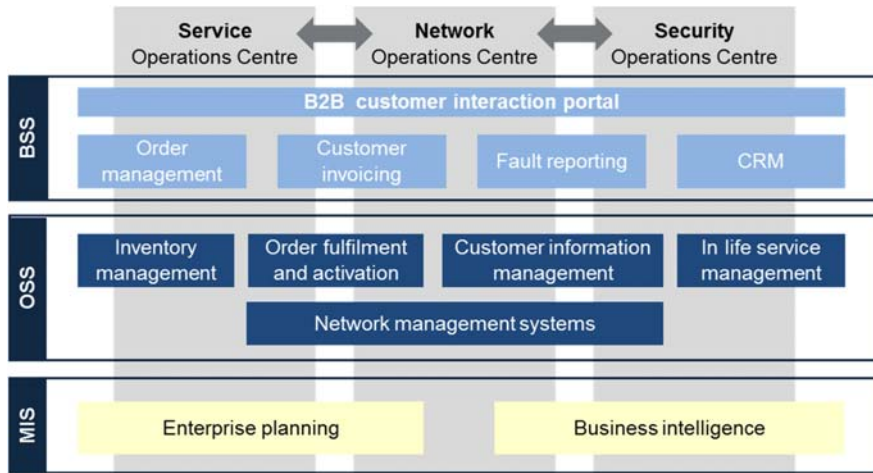
- d. **Cyber security** – The Authority requires that the SE implements necessary security controls to mitigate the risks of cyber-attacks, including the establishment of a secure and resilient cyber security architecture in which the SE operates and offers its service. This cyber security architecture should reflect the current and anticipated cyber-attack environment, identifying trends in attack data to proactively detect areas of prioritisation. The SE will further be required to establish a robust incident response process in the case where malicious attacks are detected.
 - e. **Organisational security** – To address the risk of insider attack, the SE will need to ensure that appropriate measures are in place both during the hiring phase when introducing new employees, contractors and consultants to the SE, and as part of its ongoing organisational security process to ensure that employees that originally had no malicious intent are not recruited by those wishing to do harm to the SE and the Single Network.
 - f. **Physical security** – The Authority considers it is critical for the SE to ensure the physical network security of the Single Network by developing and deploying a network with sufficient speeds, resilience and redundancy, ensuring to the fullest extent possible that the network remains operational even in the event of disruptions that impact normal operation.
17. Batelco will be required to submit a **Security Management Plan** in its Undertakings. This plan is expected to set out the steps that will be taken by the SE, including milestones if relevant, to address all of the above aspects of security.

6 Systems Separation Plan

18. By the end of the NTP4 period, the SE will be expected to offer NBN-based wholesale services on an EoI basis. As envisaged in the Framework and to give rise to the provision of NBN-based wholesale services on an EoI basis, the SE will be required to separate its systems and processes from the rest of Batelco as part of the separation process. All the SE systems are required to be physically/logically separated from those used by the BRE.
19. During the transitional phase, Batelco will be required to take steps to build towards achieving EoI. As such, Batelco will be required to submit a detailed **Systems Separation Plan**, including a roadmap for how it is to comply with informational equivalence and control requirements.
20. The Systems Separation Plan is expected to address the separation of each relevant process and system illustrated in the following diagram:

Separation Guidelines

Figure 1: Illustrative representation of the SE's systems



Source: The Authority

21. The Systems Separation Plan is expected to cover a roadmap for how Batelco will make sure that relevant SE systems will be physically/logically separated. This is expected to include:
 - a. Proposed timelines for the systems separation process, including provisional dates for key milestones. In particular, Batelco will be required to take steps during the transitional period to build towards achieving EoI;
 - b. Proposed approach for meeting equivalence obligations for any SE non-NBN-based wholesale products and services. For instance, the Authority will be mindful of the practicalities of implementing EoI for these products and services, for which Equivalence of Outputs ("EoO") may be more suitable until they are retired; and
 - c. Proposed systems separation program management, including the way in which Batelco will ensure that this separation process is aligned across all relevant departments within the SE and the rest of Batelco.
22. The Authority's view is that SE's systems should be physically/logically separated from those used by BRE in the interests of informational equivalence and control as well as the independence of the SE. This will require the SE and the rest of Batelco to use separate hardware, operating systems and physical support such as maintenance contracts. In cases where such information is stored over a virtualized environment or a cloud hosted by a third party, the SE shall ensure that necessary information security checks are put in place that prevent unauthorized disclosure of such information.
23. As described in paragraphs 7 and 8 above, the Authority expects Batelco to propose, where necessary, separate milestones for achieving the required separation including establishing the new entity. Where these milestones are different for different systems, Batelco should provide an explanation for the additional time required to achieve the required separation for specific systems.
24. The criteria for assessing Batelco's proposed separation of the systems and processes during the transitional period and in its final state will include:
 - a. **Security of customer confidential information** – Informational equivalence and control requires, in summary, that OLOs and BRE have access to the same information from the SE at the same time, but the SE shall not disclose customer confidential information

MHC

Separation Guidelines

obtained from one downstream operator with any other without express permission from the entity that provided this information. Consequently, the Authority expects Batelco to ensure that the SE's systems are separated from the rest of Batelco in such a way that prevents the disclosure of information to BRE where this information is not also accessible by the OLOs on the same terms or where this information is customer-confidential.

- b. **The scope for discrimination in the event of data leakage** – Given that the key motivation for EoI is to prevent discrimination against the OLOs, a key determinant of the acceptable form of systems separation during the transitional period should be the potential impact on the OLOs should a data breach occur. Where data leakage from the SE system to BRE would afford it a material advantage over the OLOs, this system should be subject to stronger transitional arrangements than systems which do not pose a significant threat for discrimination.
- c. **Incremental cost and efficiency** – The SE should bear efficiency considerations in mind in relation to the design of its systems. Such efficiency considerations are a key input in the decision around the method of separating the SE's systems. For example, the SE may have the choice between 'system cloning' and 'new system build'. In some instances it may be more efficient to achieve the EoI requirements by cloning systems rather than building new systems and vice versa.
- d. **The SE's security obligations** – The SE will have security obligations, as noted above in relation to the Security Management Plan, which include the responsibility to prevent unauthorised access to the SE systems. Given that the degree of separation directly impacts the ease of unauthorised access by BRE to the SE systems, it may be the case that in the interests of information security, a greater degree of systems separation will be required during the transitional period, particularly in relation to systems housing more sensitive data.
- e. **The development of EoI** – As noted above, Batelco will be required to take steps during the transitional period to build towards achieving EoI. This will be a key consideration in the assessment of Batelco's proposals for the separation of systems and processes.

7 The SE Governance Framework

25. The SE shall act on an independent basis from OLOs and BRE, to enable it to make decisions independently of all other operators.
26. In accordance with the timetable set out at Schedule 4 of the STM the Authority requires Batelco to provide an "**SE Governance Framework**" which will set out in detail the SE's proposed governance arrangements.
27. The Authority expects that in addition to the provisions in the articles and memorandum of association, more detailed rules relating to the relationship between the Rest of Batelco and the SE will be set out in a legal agreement between Batelco and the SE (the "**SE Governance Protocol Document**").
28. This section sets out the key areas the Authority expects Batelco to include in its proposed the SE Governance Framework.

Separation Guidelines

The SE Scope of Activities

29. The Authority expects that the SE's permitted scope of activities included in its memorandum and articles of association will operate in accordance with its license to delivering the services set out in its license.

SE Board Duties

30. The Authority expects that the responsibilities of the SE Board should include objectives relating to ensuring its operational independence from BRE. These should include, but not be limited to:
- a. Approving annual budgets and plans;
 - b. Approving capital expenditure; and
 - c. Approving senior staff appointments.

The SE CEO

31. The Authority expects that the SE CEO will report to the SE Chairman and the SE Board in order to fulfill any legal requirements and in relation to reporting on the overall performance of the SE against the requirements prescribed by the Authority.

8 Organisational Separation Plan

32. Batelco should structure the SE such that it is efficiently resourced and able to make decisions in its own commercial interest, independently of OLOs and BRE, and in line with NTP4 and other future NTPs.
33. To this end, Batelco's Undertakings to separate into two distinct legal entities should be accompanied by a detailed Organisational Separation Plan ("**OSP**") that addresses the following:
- a. The organisational structure for both BRE and the SE;
 - b. The proposed reporting duties of the Batelco Undertaking Compliance Officer;
 - c. The organisational structure for the SE that, at a minimum, describes the following:
 - a. Work carried out by each function, in particular, those that are customer facing
 - b. Sourcing model of each function (outsource / insource / hybrid / shared services)
 - c. Organisational hierarchy, roles, and their responsibilities.
 - d. Skills of Full Time Equivalents ("**FTEs**") by levels within each department;
 - d. The SE staff resourcing plan, including forecast of resourcing requirements;
 - e. Rules and procedures to ensure that:
 - a. Staff may only work for either BRE or SE, other than in respect of the provision of support services where Batelco can demonstrate that the provision of those services is demonstrably more efficient than would be the case if they were to be provided separately by the SE (the "Shared Services")
 - b. BRE staff that cease to be employed by BRE cannot work for the SE for a period sufficient to avoid any actual or perceived conflict of interest

Separation Guidelines

- c. The SE staff that cease to be employed by the SE cannot work for BRE for a period sufficient to avoid any actual or perceived conflict of interest;
 - f. Measures to ensure that incentive remuneration schemes for staff are based solely on the performance of staff within the entity (e.g. either the SE or BRE) they are engaged in, including penalties for any breach of Eol requirements;
 - g. Separation of the SE accommodation;
 - h. Identification of shared functions;
 - i. Branding of the SE compared with BRE; and
 - j. Identification of the specific Batelco wholesale and network business units that are to be transferred to the ownership of the SE.
34. The criteria for assessing Batelco's proposed separation of the organisational structure will include:
- a. **Staffing and resourcing proposals** – In preparing for the establishment of the SE, Batelco will be expected to determine its proposed organisational structure, transferring staff to the SE in a way that ensures it is able to fully meet its scope of business with an efficiently sized headcount.
 - b. **Identification of necessary functions** – Based on the SE's scope of business and requirements set out in these Guidelines, Batelco is expected to identify the necessary functions of the SE.
 - c. **Identification of the required skills to deliver these business processes** – Once the necessary business processes of the SE have been identified, Batelco is expected to identify the necessary skills required to deliver these processes. The Authority expects that this will be informed by Batelco's existing experience in delivering wholesale data products, but should take into account any new requirements for the SE, particularly in relation to its security and Eol requirements.
 - d. **Right-sizing** – Batelco is expected to determine the number of FTEs required to carry out the business processes of the SE. This is expected to reflect both the need to ensure that the SE is adequately resourced to fulfil these duties whilst avoiding over-resourcing and the associated inefficiencies. In particular, this right sizing approach should consider productive efficiency gains in relation to headcount as set out in the Framework.³

³ See Section 6.1 of the Framework.

Separation Guidelines

Annex 1 - Summary of Batelco Submission Requirements

35. The following table summarises the submission requirements for Batelco pursuant to these Guidelines and should be prepared in accordance with the timeline established in the STM (or as otherwise required by the Authority).

Submission requirement	
Batelco Separation Undertakings covering:	
<p>The SE Establishment Milestones</p> <ul style="list-style-type: none"> • <i>Draft Governance Protocol</i> • <i>Finalisation of Governance Protocol</i> • <i>Formation of new legal entity</i> • <i>Draft of legal agreement between Batelco and the new entity governing the transfer of assets, personnel and all other relevant legal matters</i> • <i>Finalisation of legal agreement between Batelco and the new entity governing the transfer of assets, personnel and all other relevant legal matters</i> 	
<p>Separation Milestones and Timetable</p> <ul style="list-style-type: none"> • <i>Systems Separation</i> • <i>Organisational Separation</i> • <i>The SE Business Case</i> • <i>Product Roadmaps</i> • <i>Reference Offers</i> 	
<p>Asset allocation plan:</p> <ul style="list-style-type: none"> • <i>Fibre cable</i> • <i>Copper wire</i> • <i>Duct and poles</i> • <i>Active equipment</i> • <i>Exchange buildings and cabinets</i> • <i>International landing stations and international cable</i> • <i>Office accommodation</i> • <i>Other assets</i> 	
<p>Security management plan:</p> <ul style="list-style-type: none"> • <i>National security</i> • <i>Asset security</i> • <i>Information security</i> • <i>Cyber security</i> • <i>Organisational security</i> • <i>Physical security</i> 	
<p>Systems separation plan:</p> <ul style="list-style-type: none"> • <i>B2B customer interaction portal</i> • <i>Order management</i> • <i>Customer invoicing</i> • <i>Fault management</i> • <i>CRM</i> • <i>Inventory management</i> • <i>Order fulfilment and activation</i> • <i>Customer information management</i> • <i>In life service management</i> • <i>Network management systems</i> • <i>Enterprise planning</i> 	

Separation Guidelines

<ul style="list-style-type: none">• <i>Business intelligence</i>• <i>Others</i>	
The SE Governance Framework <ul style="list-style-type: none">• <i>The SE CEO reporting</i>• <i>Process for setting financial boundaries of the SE</i>	
Organisational separation plan: <ul style="list-style-type: none">• <i>Batelco organisational structure</i>• <i>The SE organisational structure</i>• <i>The SE staff resourcing plan</i>• <i>Separation rules and procedures</i>• <i>Remuneration incentives</i>• <i>Accommodation plan</i>• <i>The SE and rest of Batelco branding</i>• <i>Identification of shared services</i>• <i>Transfer of existing business units to the SE</i>	

Separation Guidelines

Annex 2 – Project Plan

	Due Date
SEPARATION PROJECT TIMELINE	24-Mar-18
Separation Guidelines, Monitoring Compliance, & Special Temporary Measure	6-Aug-18
Publish second consultation document	12-Jul-18
Industry feedback	26-Jul-18
TRA review and issuance of Separation Guidelines, Monitoring & Compliance, and STM	6-Aug-18
Undertakings	11-Nov-18
Batelco submits separation undertakings (all submissions are made before or on this day)	6-Sep-18
Review, negotiate, and revise separation undertakings	26-Sep-18
Conduct consultation (include comments submission)	16-Oct-18
Review, negotiate, revise and publish separation undertakings	11-Nov-18
SE Business Case Review	2-Dec-18
SE submits business case (with RO submission)	26-Aug-18
Review business case and provide initial feedback	16-Sep-18
SE submits revised business case	7-Oct-18
Review SE's business case based on OLO's RO Order submission	28-Oct-18
TRA submits official response to SE's business case submission based on OLO's cross-submissions	18-Nov-18
SE to submit final business case	2-Dec-18
Reference Offer Order	24-Mar-19
Submit product requirements to SE	7-Apr-18
SE to submit initial product categories	7-Aug-18
Make initial reference offer submission	26-Aug-18
Prepare, and review the first draft of the reference offer order	15-Sep-18
Finalize the draft reference offer order	22-Oct-18
Conduct consultation with OLOs and SE on the reference offer order	12-Dec-18
Finalise reference offer	14-Feb-19
Publish reference offer	24-Mar-19
Licenses	28-Feb-19
Draft SE and OLOs license	15-Nov-18
Consult on SE & OLO Licenses	6-Dec-18
Finalise the SE and OLO licenses	6-Jan-19
Award the SE and OLO licenses	28-Feb-19

UNR