Report for Spark and Vodafone NZ

Submission

In response to the Commerce Commission's Consultation on setting prices for service transaction charges for UBA and UCLL services (25 September 2014)

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1. Introduction

- WIK-Consult has been appointed by Spark and Vodafone New Zealand ("Vodafone") to support both companies in the course of the further cost modelling and FPP process of the Commission. Nevertheless, this submission is brought to the attention of the Commission as an independent expert report.
- 2. In preparing this submission we have analysed the most recent regulatory practice regarding transaction charges for UCLL and UBA in a variety of European countries. This benchmark showed that there is no common or uniform regulatory practice in determining or controlling transaction charges in Europe. Nevertheless, this experience and practice from other NRAs might give some help or guidance to manage and handle the complex regulatory task to determine efficient cost-based transaction charges. Some of our benchmark findings are presented in this submission.
- 3. We will address only selected questions which the Commission raised in its Consultation paper. We will mainly comment on methodological aspects of pricing and costing of transaction charges and will not comment on the more legal aspects addressed in the consultation paper.



2 Regulatory practice in Europe

- 4. There is no common regulatory practice of regulating transaction charges in Europe. A variety of approaches is applied by European NRAs. They reach from sophisticated bottom-up modelling to price cap approaches. One common feature of the European price setting approaches is that they heavily rely on efficiency improvements and efficiency corrections of actual costs. That is the reason why one-off charges in Europe show a downward trend despite the fact that labour costs, which are the major cost component of transaction services, show on upward trend.
- 5. We present three examples of different regulatory approaches in the Annex each representing a typical regulatory approach in Europe. The regulatory authority in Spain has developed a complete bottom-up model to determine the efficient cost of transaction charges. The German regulator follows a hybrid approach of integrating bottom-up costing elements into a top-down approach. Ofcom in the UK is following a price cap approach where the efficiency adaptation is implemented in the X-factor of the price cap formula.
- 6. The European regulatory practice and its identification of efficiency potential in comparison to cost documents of incumbents shows, that relying on incumbents cost data is not adequate to identify efficient costs. Moreover tariff structure and service definitions show great differences between European incumbents.
- 7. The most appropriate results concerning identifying efficient costs deliver bottom-up cost models and/or the analysis of real existing transaction processes of the incumbents. The most important efficiency potentials have been identified in the following areas:
 - (a) Introduction of electronic order interfaces to automate order communication between carriers.
 - (b) Introduction of integrated IT-systems with full automation of order processing
 - (c) Bundling switching and driving processes in order to realise economies of scale and scope with the effect of a reduction of cost per unit.
 - (d) Field analysis with time measurements of the real existing transaction processes in reality: Results show, that cost calculations of incumbent do not reflect the resources used in a reality (overestimation of costs) and/or that processes themselves are not efficiently designed. Standardised analysis methodologies like the REFA methodology support this finding.



- (e) Comparisons with processes of competitors help to identify efficiency potentials. Condition for such an approach is, that the regarded competitor itself is efficient.
- (f) Outsourcing of processes can reduce costs if the outsourcing process is adequately designed.
- 8. A practicable starting point to determine efficient costs until such analytical approaches have been established can be to start from the existing transaction charges and to apply a efficiency gain factor. In so far as benchmark data of efficient carriers with comparable high level data are available, this logic can be applied before sophisticated approaches like bottom-up models can be used.

3 A few remarks on the specific questions of the Commission

Question 1: Do you agree that in the FPP determinations the Commission can only set prices for the transaction charges for which it set prices in the IPP determination?

- 9. The Commission has developed the preliminary view to only setting prices for those service transaction charges for which the Commission set prices in the IPP determination.¹ This means that 6 of the 9 transaction charges and all ancillary charges in the UCLL STD would not be subject to FPP determination.² In the UBA IPP determination only 10 of the 23 transaction charges of the UBA STD were benchmarked and none of the ancillary charges in the UBA STD.³
- 10. The Commission presents two reasons why it reviewed only a subset of the relevant transaction charges. Firstly, the Commission intended to only benchmark "prices for the core connection and transfer components". 4 Secondly, the Commission did not set prices where it could not find relevant benchmarks.
- 11. In principle all transaction charges should be reviewed which have economic relevance for the access seeker and which are bottlenecks in the sense that the access seeker can only buy the service from Chorus. This principle would lead to a larger set of transaction charges which should be reviewed and determined in the FPP. Because the Commission is changing and has to change its price determination principle from a benchmark approach to a cost-based pricing approach, the limitations of the benchmarking approach no longer prevail. The

¹ See Consultation paper, para 19ff.

² See Consultation paper, para 12.

³ See Consultation paper, para 14.

⁴ See Consultation paper, para 12.



Commission now has the ability to determine all relevant service transaction charges by identifying and calculating their relevant costs. Cost orientation safeguards competition and consumer welfare. Moreover most of the transaction and ancillary services are produced by the same labour and IT resources. A differentiation between reviewed charges and not reviewed charges results in inconsistencies and the possibility for detrimental cross subsidies by Chorus.

12. A principles based approach would determine all relevant transaction charges in the FPP and not only that subset for which prices have been set in the IPP determinations. We cannot comment on whether a principles based approach to set transaction charges would not be feasible to the Commission for legal reasons and constraints.

Question 3: Do you agree that when the Commission sets the prices for the transaction charges in the FPP determinations, it must apply the FPP of TSLRIC?

- 13. We agree that the Commission should apply the TSLRIC cost standard and costing methodology to determine prices for transaction services in the FPP.
- The TSLRIC cost standard has from an economic perspective the same 14. justification and meaning for service transaction charges as it has for service recurring charges. Although the cost structure of transaction services differs a lot from that of the UCLL and UBA recurring services this does not give reason to assume that the TSLRIC cost standard would not be appropriate or not applicable. Transaction services are much more characterized by labour costs than by capital cost compared to the UCLL and UBA recurring services. Also the degree of directly attributable costs is significantly larger and correspondingly the degree of shared cost is lower for transaction services than it is for the recurring services. For this reason it is conceptually and practically much easier to apply TSLRIC costing and pricing principles for transaction services than it is for the recurring services. Therefore we do not share the Commission's concerns of applying the TSLRIC methodology to service transaction charges as, expressed in para 31 of its Consultation paper. The TSLRIC methodology fits comfortably for being applied to transaction charges.

Question 5: Are there any other options for determining the costs of providing the transactions?

15. If the Commission does not have the resources or the time to develop a bottomup costing approach for transaction services it may follow an easier approach leading to efficient costs until it can apply the (first best) bottom-up costing approach including an analysis leading to efficient processes as we have seen in



Spain and Germany. Under this approach the Commission sets starting charges which are based on previous charges with adjustments to exclude any costs found not to be directly relevant to the services in question. Then a formula CPI – X is applied to the starting charges. CPI represents the consumer price index and reflects unavoidable cost changes to Chorus. X is a percentage representing steady efficiency gains to be achieved by Chorus due to further process optimization, learning curve effects, use of more efficient IT systems and economies of scale so as to achieve cost-orientation over time.

- 16. Separate CPI X baskets can be set on defined sets of services grouped together according to homogeneity in terms of their characteristics, competitive conditions and costs. A sub-cap can be set on each service to prevent excessive price movements (and potential strategic gaming) within each basket.
- 17. The pricing approach described above represents the approach which the British regulator Ofcom is generally applying for the regulation of transaction charges. Such an approach represents a reasonable solution until better analytical approaches (bottom-up models, process analysis, field measurements etc.) are established. This holds under the condition, that adequate benchmarks with comparable data of efficient carriers are available.

Question 6: Which option should the Commission take?

Top-down

- 18. Chorus has submitted that a top-down costing approach and basing the modelled cost on the cost Chorus faces under the contracts it has with its service companies who deliver the transaction services would be most suitable to the Commission. This approach is supposed to be the simplest and most reflective of reality.
- 19. It may be true that such a costing approach is most reflective to the costs which occur to Chorus today as actual costs. Such cost, however, are not those which the Commission has to identify under a TSLRIC costing approach. The Commission has to look for and has to identify the efficient cost of an efficient operator to provide the transaction services. There are four reasons why the costs identified under the top-down approach as proposed by Chorus do not represent the efficient cost of an efficient operator:
 - (a) Contractors provide the transaction services as defined and in the process structure as prescribed by Chorus. These processes must not necessarily be efficient.



- (b) Chorus does not have proper incentives to minimize the cost of service provision through contractors.
- (c) Chorus has a strong incentive to allocate more costs to regulated than to unregulated transaction services as would be justified from a TSLRIC perspective.
- (d) The Commission intends to set prices in the FPP for a five year regulatory period. Costs identified on the basis of contracts of today (or even yesterday) do not properly reflect the relevant cost in five years time.
- 20. Chorus' service companies provide the transaction services according to the processes which have been defined by Chorus. Even if the service companies provide the services Chorus is requesting from them efficiently, the resulting costs may not be efficient. This outcome can occur if the underlying transaction process is not defined and structured efficiently. The overall efficiency of transaction services very much depends on the degree of automation of the processes, the use of appropriate IT systems and the proper interfaces. In Germany for instance the costs of ordering processes have been reduced by a factor of three over time and the corresponding transaction charges today are now only a fraction of what they had been some years ago.⁵ The German regulator insisted and set the proper incentives to significantly improve the efficiency of transaction processes. Therefore the Commission cannot rely on outsourcing costs of Chorus unless it has checked whether the underlying processes are defined and managed efficiently if it want to achieve efficient costs.
- 21. Chorus is claiming that the prices that the service companies charge Chorus follow from a nationwide competitive tender. Therefore, so the supposed logic, these prices must reflect efficient costs. However, because Chorus is passing through major parts of the service companies' costs to the RSPs, it has no incentive to minimize those costs. At the opposite, because Chorus is claiming to receive an appropriate margin for Chorus' internal costs and overheads⁶ on top of the service companies prices it has an incentive to inflate such prices. Furthermore, the structure of the service companies compensation may not be the same as the transaction charge structure so that arbitrary allocations may be needed. Furthermore, Chorus has only limited incentives to control and guarantee that the costs claimed by service companies are compliant with the existing charging arrangements. Many transaction charges are dependent on a proper classification of the services to be performed by technicians. Compliance with actual work then becomes an issue where the RSPs have a clear incentive to control but not Chorus because of cost pass through.

⁵ See para 53.

⁶ See Chorus submission of August 6, 2014, para 168.



- 22. Chorus is arguing that it has an incentive to keep the service companies prices low because it also makes use of these services to provide its own commercial unregulated services. This would only be the case if the transaction services which Chorus uses for its own commercial services would not be distinguishable from those transaction services which are provided to the RSPs. Otherwise Chorus would have a strong incentive to allocate the service companies' costs such that its own demand is favored at the expense of those transaction charges which Chorus passes through to the RSPs. As Spark has formulated: "Chorus has a strong incentive to 'rebalance' charges between regulated and commercial services".8
- 23. Chorus is requesting a cost escalation methodology to represent the change of costs over the course of the regulatory period. While today costs of service companies may not represent the relevant cost in five years time, it is not appropriate just to inflate todays cost in an escalation procedure. It may be true that labour costs, the major cost component of most transaction services, increase over time. However, the efficiency of providing the services may and should increase over time too. It is for this reason that the British regulator Ofcom assumes annual productivity/efficiency factors in its price cap formula for transaction charges which can even be above 10%. These efficiency improvements can easily dominate any increase in labour costs. It is for this reason that in many European countries transaction charges decrease over time.
- 24. Relying on Chorus service companies' costs would not lead to determine the efficient costs of transaction services. The Commission should not rely on this top-down approach.
- 25. We are generally skeptical to determine regulated prices on the basis of a top-down approach which solely relies on the cost data provided by the regulated firm. The information asymmetry inherent in this approach generally generates a biased to inflate costs away from the relevant efficient costs. The regulator should develop its own view on the relevant costs and should use sources which guarantee an unbiased determination of costs. For these general reasons and the specific reasons detailed in the previous paragraphs we cannot recommend the Commission to use the top-down approach to determine the TSLRIC of the transaction services.
- 26. For the reasons mentioned above it is common practice that NRAs in Europe in most cases do not exclusively rely on a top-down approach based on the cost data provided by the regulated firm. NRAs in Europe usually rely on bottom-up approaches, on top-down approaches with cross checks or on other approaches.

⁷ See Chorus submission of August 6, 2014, para 166.

⁸ Spark cross submission of 20 August 2014, para 151.



Bottom-up

- 27. A bottom-up cost modelling approach represents the most appropriate method to determine the TSLRIC for recurring charges as well as for one-off transaction charges. This method directly determines the relevant efficient cost of an efficient operator while all other methods only indirectly and imperfectly lead to this regulatory outcome.
- 28. Under a bottom-up approach the transaction processes are divided in basic activities and resources (like labor time, material, drive to customers premises, administrative processes, etc.). Input data are mainly time units for the basic activities and cost data (labour cost per minute for a certain activity). For each transaction the relevant activities are allocated in an approach similar to a routing matrix approach. Insofar as certain basic activities have to be supported by IT systems, those systems have to be dimensioned and their capex and opex have to be calculated and allocated to intermediate outputs which then are used by the basic activities. The costs of the IT systems have then to be allocated to the basic activities.
- 29. We have described the bottom-up costing elements of the German regulator and the bottom-up model of the Spanish regulator in more detail in Section 2 of this submission. We have recognized that the Commission is aware of the sophisticated bottom-up approach the Danish regulator has conducted.

Top-down with cross checks

- 30. All arguments which we presented in para 20 to 23 lead to the conclusion that a top-down approach if applied at all needs to rely on independent cross checks of the data provided by Chorus conducted by the Commission.
- 31. The Commission proposes a cross check approach regarding the data provided by Chorus based on similar charges in other countries. The Commission leaves it open how the details of such an approach may look like. In any case this approach does not address the roots of the problem and the major challenge to handle: The determination of efficient transaction processes in New Zealand. In Section 2 we have described how some European regulators have conducted efficiency corrections (de facto improvements) on the cost data provided by incumbents to better achieve the target of efficient costs. These examples may inspire the Commission to adopt one or the other of these methodologies to determine the relevant costs in New Zealand if it really wants to follow this approach.
- 32. In para 40 of its Consultation the Commission seems to follow Chorus' request to allow for an appropriate margin for Chorus internal cost on-top of the prices that



the service companies charge Chorus. This approach runs the risk that RSPs are subject to a double marginalization of Chorus' service companies and Chorus itself. In case Chorus faces its own cost in addition to the cost of its outsourcing partners, such costs should be identified and they have to be compensated for if they efficiently occur. The Commission, however, should not allow for a general margin for Chorus on-top of the service companies' prices. This would lead to an unjustified double-recovery of overhead costs.

Conclusions

33. The Commission should take the first best option to determine the TSLRIC of transaction services which is to develop a bottom-up calculation model for that purpose. It should take a few weeks of time to develop such a model. If there is not sufficient time to implement this approach until the draft determination of the FPP we would recommend to use an approach which we described in para 15f. Under this approach the starting point of the new transaction charges would be the previous transaction charges. They would be reduced by a factor representing efficiency gains over time and to reduce cost inefficiencies contained in the current charges. Such an efficiency factor could be developed from international benchmarks. As soon as possible the Commission should then substitute this approach by a price determination based on the bottom-up modelling of the relevant transaction process.

Question 7: Do you agree that it is open to the Commission to merge some the transaction charges into other charges?

- 34. The Commission is unclear in para 41ff. of its Consultation what it really means with merging of some transaction charges into other charges. It could either mean to group some transaction services together or it could mean that transaction charges are merged into recurring charges for UCLL and/or UBA.
- 35. Merging transaction charges by grouping together can make sense if services are produced within the same work flow or process. The same holds if the costs for different transaction services are not sufficiently separable from each other. Even if the costs are sufficiently separable there can be reasons for grouping. If the cost differences between services are low, merging can be reasonable in this case because this simplifies invoicing and the control of invoices without the risk, that charge averaging leads to over- or underpayment. Candidates for such a deeper analysis are for example the transaction charges number 1.9 -1.36.¹⁰

⁹ See Chorus submission of August 6, 2014, para 168.

¹⁰ Consultation on setting prices for service transaction charges for UBA and UCLL services, Consultation paper, 25 September 2014, pages 10,11.



- 36. From a methodological perspective we cannot support merging transaction charges into recurring charges. Cost of transaction services have a one-off character. They are caused by a certain event. Recurring charges on the other hand are related to services which provide a certain capacity over a certain period of time. Both services are demand related and complementary to each other in the sense that the recurring service can only be used if certain transaction services are provided. Merging of transaction charges into recurring charges could technically be handled by assuming a certain set (and amount) of transaction services related to a relevant customer lifetime for a recurring service. This is an easy task for a connection service but it would need a lot of arbitrary assumptions for transfer services.
- 37. In any case merging transaction charges into recurring charges is not in line with cost causation and the proper allocation of costs. Applying a TSLRIC costing and pricing methodology would not support such merger of charges.
- 38. Merging transaction charges into recurring charges might also have adverse effects on some RSPs. RSPs follow different business models, have different customer structures, systematic differences in customer lifetimes and therefore a different demand for transaction services. Integrating transaction charges into recurring charges would impact RSPs in a different way depending on their business model. Distributional effects occur which may also distort competition in an unpredictable way.
- 39. Depending on the ability of the Commission to forecast the amount and structure of transactions properly the outcome may harm or favor Chorus in an unjustified way. The resulting recurring charges may lead to over- or under-recovery of relevant costs.
- 40. Merging transaction charges into recurring charges is not in line with cost causation and therefore does not represent a proper application of the TSLRIC costing methodology. It will lead to an unpredictable burden to some RSPs, unjustified and unpredictable effects on competition and may lead to over- or under-recovery of Chorus' costs. We cannot recommend such an approach.
- 41. In any case potential merging has to be checked very carefully due to the possible disadvantages described above. Only if advantages overcompensate disadvantages merging should be practiced. A typical merging example is the standard fault service. Generally this service is paid with the recurring fees in order to use the advantage of soften dysfunction risks which cannot be influenced by the purchasers.



Question 8: Do you agree that the Commission is entitled to set bulk rates for UBA transaction charges?

- 42. Bulk rates in connection with transaction charges are relevant if the underlying processes reflect economies of scale (and scope) if a bulk of transactions is carried out for the same wholesale customer at the same location or exchange. Cost savings due to bundling of transactions can occur for the UBA service in a similar way as they occur in the case of UCLL. Therefore there is no reason to exclude the UBA service from applying bulk rates for transaction charges in case such cost savings occur.
- 43. According to the nature and the structure of cost savings due to bundling of transactions the Commission may consider a more differentiated bulk rate differentiation as applied for UCLL transaction charges today. The Spanish regulator¹¹ for instance applies a nonlinear pricing structure for transaction services including a fixed and a variable price component:

$$p = A + B \times N$$

A is the fixed price component, B the variable component and N the number of transactions. Such a pricing structure seems to reflect the cost savings due to bundling and economies of scale better than a threshold value upon which a reduced charge is being applied.

¹¹ Source: Oferta de Acceso al Bucle de Abonado, Febrero 2014, page 396, http://www.cnmc.es/Portals/0/Ficheros/Telecomunicaciones/Regulacion_sector/ofertas_mayoristas/OBA/201402_OBA_.pdf; Source: Resolución por la que se acuerda notificar a la Comisión Europea, a las Autoridades Nacionales de Reglamentación, al Organismo de Reguladores Europeos de Comunicaciones Electrónicas, al Ministerio de Industria, Energía y Turismo y al Ministerio de Economía y Competitividad un proyecto de medida sobre los precios de los servicios GigADSL, ADSL-IP y NEBA, pages 88, 89, http://www.cmt.es/c/document_library/get_file?uuid=24d216a0-deb2-4407-bb19-c60a2d0143e4&groupId=10138.



Annex: European regulatory approaches

A1 Spain

- 44. Transaction charges are determined on the basis of a BU-LRIC model which the Spanish regulator CMT has developed for that purpose. 12 The model is applied for transaction charges relating to LLU, fibre access based bitstream (NEBA) and copper based bitstream (OBA) products.
- 45. The model dismantles all transaction services and processes into basic activities. For each of these activities a relevant amount of minutes of labour to efficiently conduct the activity is identified and determined. For each transaction service the relevant amount of basic activities is determined. The number of minutes is added up and valued with the relevant cost of labour. CMT assumes that administrative and network management processes are mainly conducted by Telefonica employees while other transfer activities and activities at the customers' premises are mainly outsourced to service companies. CMT assumes that the labour costs of service companies only amount to 65% of Telefonica's labour costs.
- 46. Economies of scales while driving and line switching are considered due to the fact, that these works are done for several line switches together. Additionally it was considered that high IT-automation of the order process leads to a reduction of working time.
- 47. Besides labour costs cost of materials, IT and common cost are allocated to the transaction services. Estimated IT costs are divided by the volumes of transaction services which need IT support. Each transaction service unit then has to bear a fixed amount of 2.48€ for IT use. The mark-up for common costs is set at 5% of all other cost.
- 48. To populate the model with data CMT requested input from market participants. Data were checked and consolidated by CMT and formed the input parameter basis for the model.

A2 Germany

49. The price structure for transaction services is rather differentiated in Germany. Connection charges for LLU differ according to technical characteristics of the line and whether work at the cabinet or at the customer's premises is needed or not. Furthermore, charges differ for new connections and the transfer of lines. The

¹² http://ftp.cmt.es/201305_Modelo_costes_altas_servicios_acceso_al_bucle.zip.



access seeker is separately charged for line cancellation and in case of change of line usage. Additional charges are applied for service delivery at a certain time, repairing in-house cabling, and express repair of lines.

- For regulating transaction charges BNetzA, the German regulator, starts with the 50. cost data provided by Deutsche Telekom. BNetzA does not have its own bottomup cost model for transaction charges. The top-down generated data, however, are checked and corrected with a mixture of bottom-up and top-down calculations. 13 To get its own view of transaction services efficiency BNetzA relies on work conducted by the research and consultancy organisation Fraunhofer Institut. Fraunhofer used the standardised REFA methodology to evaluate and determine efficient working (e.g. line transfer, driving to customer premises) and administrative processes (e.g. documentation of line transfer). For that purpose representative samples from different regional offices of Deutsche Telekom are taken and time measurement techniques are used to identify the efficient process time. This information then is used to reduce process time as claimed by the incumbent. Further efficiency corrections were made by considering bundling and scale effects of process related work. Because providing transaction services through internal labour resources of the incumbent is more expensive than providing the services through external service companies BNetzA increased efficiency and reduced costs by increasing the outsourcing factor over time.
- A few years ago BNetzA initiated a major change of transaction services for LLU and bitstream access by introducing an electronic interface for the ordering processes. 14 On the basis of guidelines from the regulator Telekom and access seekers negotiated and standardised a new electronic interface. This interface was the basis for a complete reorganisation and a significant degree of automation of several transaction processes. The new interface not only reduced administrative costs of the incumbent, the interface also made the interaction of access seekers and access provider much more efficient. This procedural change significantly reduced the duration and costs of administrative processes. Furthermore it also reduced the amount of failures in transferring the data automatically instead of manual transposition significantly. On the basis of the costs of the new electronic interface BNetzA reduced transaction charges step by step in order to incentivise the incumbent to internalise the cost savings. Moreover process costs have not only been reduced by the introduction of a IT interface but also by reorgansing internal IT processes. Some years ago incumbent Telekom completely reorganized and automated its IT architecture for LLU and bitstream services ("WITA-architecture") because these wholesale services are mass market products. That especially significantly reduced the duration of

¹³ See planned BNetzA decision BK 3c-14/001.

¹⁴ See decision of BNetzA, BK 3e-09-044.



- administrative processes and so corresponding costs. Efficient costs mostly rely on automated IT processes and less on manual processes.¹⁵
- 52. BNetzA itself regularly draw samples and examines administrative processes at Telekom locations for efficiency. 16
- 53. In particular due to these efficiency gains by redefining and reorganising the transaction services the corresponding charges did not go up (due to labour cost increases) but went down significantly. Major transaction charges in Germany today amount to only one third of the level they had been at the introduction and the first regulation of the LLU service.

A3 UK

- Transaction services for LLU include line provision, migration, cease and cancellation and ancillary services like tie pair modification, amend order, standard line test. The costs of cease service are recovered from the respective line rental charges. Ofcom considers that such an approach will foster switchingwith competitive effects offsetting any increased charge on line rental. 17 Enhanced care and expedited connection fees are currently not regulated. Openreach offers four service levels for reported faults, with a difference in the time period within which a fault should be repaired. The service level included in LLU and shared access line rentals is service level 2 - repair by the end of the next working day after the fault is reported. Higher levels of service incur an additional charge. Enhanced care implies continued higher service levels, whereas 'expedite' repair can be demanded as a 'one-off' service. There is no cost-orientation or charge control obligation on enhanced or expedited care. Instead, such charges must be fair and reasonable. Ofcom's reasoning is that there is currently no robust cost information available from BT, and that it would be difficult to calculate the incremental cost of having a larger workforce to enable improved service levels. Ofcom also noted that it had set minimum quality standards for the standard service levels and that the use of enhanced care by non-BT providers was low. Lastly Ofcom noted that should service providers consider charges excessive for these services, they could raise a dispute.
- 55. Transaction charges in the UK are regulated according to a price cap approach. Individual charge controls are set under a formula CPI +/- X where the CPI is the consumer price index and X is a percentage calculated so as to achieve cost-orientation on the basis of current cost accounting fully allocated costs (CCA FAC)

¹⁵ See planned BNetzA decision, BK 3c-14/001, page 34.

¹⁶ See planned BNetzA decision, BK 3c-14/001, for example page 36.

^{17 &}lt;a href="http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-13/summary/LLU_WLR_CC_2014.pdf">http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-13/summary/LLU_WLR_CC_2014.pdf, page 103.



by the end of the charge control period (2017) with an additional expectation of annual efficiency savings.

- 56. Separate CPI+-X baskets controls have been set on five defined sets of LLU ancillary services, which group together services which are homogeneous in terms of their characteristics, competitive conditions and costs. A subcap of CPI+-X+7.5% has been set on each service to prevent excessive price movements (and potential gaming) within each basket. British Telecom (BT) is required to ensure that charges for similar services within the control are aligned; and BT is required to align all migration charges which involve jumpering a volume-weighted average of the incremental costs for these services. Starting charges are based on previous charges (affected by previous charge controls) with adjustments to exclude any costs found not to be directly relevant to the services in question. The use of previous charges as the 'starting point' for subsequent charge controls allows BT to retain any profits it made through achieving efficiencies in excess of those envisaged in previous charge controls.
- 57. The following table shows the regulated recurring and one-off transaction charges for LLU. Ofcom generally assumes productivity gains to be achieved for transaction charges ranging from 1.5% for migration and 10.7% for bulk migration.



Basket/ Service	Charges at 31 March	Charge during the	Forecast charges, nominal (£)		The value of
	2014 (£)	first year of the charge control, nominal (£)	2015/16	2016/17	'X'
MPF Rental	83.92	86.11	88.15	90.24	0.3%
SMPF Rental	9.89	5.54	3.80	2.61	-33.4%
MPF Single Migration	30.65	30.83	31.00	31.18	-1.5%
MPF Bulk Migration	28.42	25.96	23.71	21.66	-10.7%
MPF New Provides basket	N.A.	Various	Various	Various	-2.8%
SMPF Single Migration	30.65	30.83	31.00	31.18	-1.5%
SMPF Bulk Migration	28.42	25.96	23.71	21.66	-10.7%
SMPF New Provide	30.65	30.83	31.00	31.18	-1.5%
MPF Cease	0.00	N.A.	N.A.	N.A.	N.A.
SMPF Cease	0.00	N.A.	N.A.	N.A.	N.A.
Hard Ceases basket	N.A.	Various	Various	Various	0.4%
Other LLU ancillaries basket	N.A.	Various	Various	Various	-5.0%
Co-Mingling New Provides and Rentals basket	N.A.	Various	Various	Various	-3.4%
Tie Cables basket	N.A.	Various	Various	Various	-11.8%

Source: Ofcom

Source: http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/fixed-access-market-reviews-2014/statement-june-2014/annexes.pdf, page 486.

- 58. A similar charge control mechanism is applied for bitstream access service. The charge control basket includes ancillary (mainly one-off) services relating to WBA specifically:
 - End-user migration charges (subject also to a subcap due to important effects on competition)



- End-user regrade charges (when end-users move to or from premium service)
- End-user cancellation charges
- Communication provider handover (charges related to the connection by the communication provider to IPstream)
- 20C interconnection links 1Gbits and 10Gbit/s (charges for any service to connect between handover points for IPstream and the communication provider's network)

The broadband availability checker was excluded from the charge control – the WBA product allows use of the checker free of charge up to a quota. Ofcom considers that any usage above the quota should be discussed with BT. Ancillary services which relate to upstream products provided by BT Openreach (e.g. migration from WBA to LLU) are not considered part of the WBA basket, but rather addressed within the relevant controls for LLU and/or WLR.

59. Whereas in the previous 2011 charge control, cost estimations for the end of the charge control period were based on a bottom-up cost model, in 2014, Ofcom used BT's reported costs (in its regulatory accounts) for this purpose (CCA FAC), as this approach was deemed to be more straightforward, and minimize regulatory error. The resulting charge control was CPI-10.7%. Ofcom also set subcaps for certain services and set 'cease' charges to zero. A summary of the charge control is shown below.¹⁸

Basket	Services within scope	Main control	Sub-caps
IPstream Connect	IPstream Connect Max and Max Premium End User Access – Connection	CPI - 10.7%	
	IPstream Connect Max and Max Premium End User Access – Rental		CPI – 4.7%
	IPstream Connect Max and Max Premium End User Access - IPstream Connect EU bandwidth charge per month		
	IPstream Connect Contracted Bandwidth per Mbit/s per node rental		CPI – 7.7%
	IPstream Connect End User Re-grade IPstream Connect End User Migration ⁴⁰⁷		CPI – 4.7% CPI – 4.7%
	IPstream Connect ADSL Cancellation IPstream Connect Communication		CPI - 4.7%
	Provider (CP) Handover		
	IPstream Connect 20C Interconnect Links 1Gbit/s and 10Gbit/s		
Cease	End User Cease Services: i.e. any service required to disconnect an end user in Market A from any wholesale broadband access product provided in Market A	Cease charge set to £0	

¹⁸ Table 7.1 Ofcom WBA statement.



Source: Table 7.1 Ofcom WBA statement http://stakeholders.ofcom.org.uk/binaries/consultations/review-wba-markets/statement/WBA-draft-statement.pdf, page 204.

Ofcom set the 'cease' charge to zero on the basis that it is difficult to accurately estimate the cost and that lines are typically soft-ceased with jumpers left in place (thereby minimizing costs). Although Ofcom acknowledged that occasionally left in jumpers would need to be removed to serve other customers, low growth in the product meant the effect was likely to be minimal.

- 60. Ofcom models costs of LLU and bitstream and so the +/--X-factor for the purposes of setting charge controls using a top-down model based on accounting data from BT's regulatory financial system, which is allocated to services based on usage factors. Base year costs are forecasted forwards using asset volume elasticities (AVEs) and cost volume elasticities (CVEs) which respectively indicate how capital and operating costs vary in relation to volumes.
- 61. After having a deeper look to Ofcoms descriptions of its indicator analysis, our impression is, that the identification of the efficiency potential is, in comparison to the Spanish and German regulatory practice, more a high level estimation of general savings than an analytical examination of processes necessary to produce cost efficient transaction and other LLU services. ¹⁹ Moreover this data mainly rely on BT Openreach data of the past and of its own forecasts or external sources. Even the external benchmark data is questionable: This data does not reveal, if it comes from incumbents which fully use efficiency potential. If the data or part of it comes from mostly efficient competitors, the potential for efficiency gain by BT Openreach is underestimated. Ofcom also excluded certain costs from BT's regulatory reporting which it considered not relevant to the services in question including directory costs, costs associated with insurance etc.

¹⁹ http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-13/annexes/annexes.pdf, pages 33 to 39.