

Broadband Delivery Framework

Call Off ITT Part 2, Appendix 4:

Compliance Matrix

Date: 22 August 2014 Version: 4.a Status: Final







Bidder Instructions:

- The compliance matrix MUST be completed by the Bidder to reflect the compliance of its Solution with the Local Body's requirements. The Bidder should explain, in the compliance matrix, any proposed variance from its Reference Supplier Solution compliance matrix (as set out in the Framework). Only variances resulting due to Local Body specific requirements/circumstances are permissible – the Bidder should identify such cause and the corresponding impact.
- 2. The Bidder MUST complete: (i) a Solution Compliance table; (ii) a Component Compliance table for each of their Solution Components and (iii) a Further Service Requirements Compliance table.
- 3. Any Partial-Compliance or Non-Compliance MUST be explained and mitigated in the provided fields.
- 4. The Bidder must complete a separate Component Compliance table for each of their Solution Components. Bidders should enter the component ID at the top of the table, and should also change the table name to the solution component ID. If the Bidder has more solution Components than there are tables in this template, then the Bidder is requested to create a new table by copying one of the others.
- 5. The Solution Component compliance results MUST then be appropriately reflected in the overall Solution Compliance table.
- 6. The response in the Further Service Requirements compliance table MUST reflect compliance against the requirements described in section 2 of Part 2 of this ITT.

Table of Contents

1	Solution Compliance	4
	Component Compliance 1	
3	Component Compliance 2	27
4	Component Compliance 3	
5	Component Compliance 4	
6	Component Compliance 5	
7	Component Compliance 6	
8	Further Service Requirements	Error! Bookmark not defined.

Solution Compliance

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
Solution R	Requirements			
2.1	The Supplier Solution shall be an Open Access Network which supports the UK's broadband policy objectives by providing Retail Service Providers the Wholesale Access Products and Services through Solution Components that can support Take-up.			
2.2	The Supplier Solution shall provide wholesale access network services from Handover Points to End User network termination points, supporting the provision of Wholesale Access Products and Services in the Coverage Area.			
2.3	The Supplier shall implement, operate and maintain the Supplier Solution to provide:			
2.3.1	Wholesale Access Products and Services delivering the level of Access Line Speed and Busy Hour Committed Rates to the agreed number of premises in each of the specified geographic areas within the Coverage Area as set out in the Speed and Coverage Template;			
2.3.2	Wholesale Access Products and Services at charges which allow Retail Service Providers to provide affordable superfast and standard broadband services to End Users;			
2.3.3	 2.3.3 community solutions to the following communities in the Coverage Area (as agreed between the Supplier and the Local Body during the relevant Call Off Procedure): (a) [•] [Bidder Note: these will be defined in Local Bodies' ITTs]. 			
2.4	The Supplier Solution shall provide:			
2.4.1	Integrated network access and data transport components to End User Premises that comply with the relevant NICC standards or achieve			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	functions/performance levels that are equivalent to or better than those provided for by such standards as are necessary to ensure interoperability;			
2.4.2	Integrated network access and data transport components to Handover Points that comply with the relevant NICC interconnect standards or achieve functions/performance levels that are equivalent to or better than those provided for by such standards as are necessary to ensure interoperability.			
2.5	The Supplier shall mitigate and minimise, in accordance with Good Industry Practice, the number of single points of failure within the Network.			
2.6	The Supplier Solution shall be capable of enabling Symmetrical services for RSPs.			
2.7	The Supplier shall consider potential future demand by itself and alternative operators in the infrastructure design of the Supplier Solution and the deployment of physical assets, and shall design the Supplier Solution accordingly in order to minimise the likelihood of further creation of infrastructure assets, including for example in the course of delivering publically-funded mobile infrastructure projects.			
Operation	S			
2.8	The Supplier shall provide the same Automated Retail Online Platform (capable of handling volume transactions) for use by all Retail Service Providers. Where the Supplier is developing new systems and associated processes, these shall align with an industry standard service management framework (e.g. FTM Framework, eTOM, ITIL).			
2.9	The Supplier shall provide a Lead-to-Cash Process to support Retail Service Providers which, as a minimum, shall include the following:			
2.9.1	order entry;			
2.9.2	order fulfilment such as line testing;			
2.9.3	distribution;			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
2.9.4	billing & invoicing; and			
2.9.5	customer payment/collection.			
2.1	The Supplier Solution shall include capabilities so as to be able to service MACDs.			
2.11	The Supplier shall provide full OSS facilities to provide high quality and on- going operational management to Retail Service Providers, and which as a minimum shall include:			
2.11.1	Maintaining network inventory (including both physical and logical);			
2.11.2	Providing communications providers with location-based, capacity management information for all offered products on subsidised infrastructure;			
2.11.3	Provisioning services;			
2.11.4	Configuring network components;			
2.11.5	Monitoring and managing faults;			
2.11.6	Trouble-ticketing; and			
2.11.7	Service assurance.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
2.12	The Supplier's OSS shall be designed so as to be capable of being scaled to manage increased Take-up delivered by Retail Service Providers as necessary to achieve the Minimum Service Requirements. All OSS/BSS Supplier systems that are not as at the date of this Framework Agreement capable of dealing with large volumes of operations shall be upgraded as part of the Deployed Services so as to become compliant with the NICC B2B specifications.			
2.13	The Supplier shall operate a BSS, which as a minimum shall include the following B2B processes:			
2.13.1	RSP contact service;			
2.13.2	Customer relationship management;			
2.13.3	Order management;			
2.13.4	Order fulfilment;			
2.13.5	Service activation; and			
2.13.6	Billing and invoicing.			
2.14	The Supplier's BSS shall be designed so as to be capable of being scaled to manage increased Take-up delivered by Retail Service Providers whilst continuing to meet at least the Minimum Service Requirements.			
2.15	The Supplier shall provide a service management model to address disputes with and complaints from Retail Service Providers.			
2.16	The Supplier shall have standard OSS and BSS processes and procedures for Retail Service Providers. These shall, as applicable, comply with the relevant NICC standards or achieve functions/performance levels that are equivalent to or better than those provided for the purpose of such standards.			
2.17	The Supplier Solution shall enable RSPs using it to adhere to Ofcom's Approved Code of Practice for Complaints Handling as the same may be amended, updated or replaced from time to time.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution			
Project De	Project Delivery						
2.18	The Supplier shall roll out its Wholesale Access Products and Services in accordance with the relevant Call Off Contract and in doing so shall:						
2.18.1	adopt a standard document project management approach, and						
2.18.2	meet and communicate with the Local Body team as appropriate.						
2.19	The Supplier shall, where a Local Body investment includes European Regional Development Fund (ERDF) funds, meet standards required by ERDF for reporting and branding as set out in Schedule 5.4 (Additional Funding) of the relevant Call Off Contract.						
2.2	The Supplier, if requested by a Local Body, shall confirm in the Supplier Solution the extent that it will reuse those Local Body assets identified in Schedule 4.2 (Authority Assets) of the relevant Call Off Contract so as to reduce implementation costs.						
2.21	The Supplier Solution shall include:						
2.21.1	the agreed and defined Milestones for delivery of the Supplier Solution;						
2.21.2	the timetable for the preparation and delivery of the Supplier's detailed marketing strategy;						
2.21.3	the Supplier's change management process for change to the Project Plan, an example of which could be the rollout delivery phasing;						

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
2.21.4	the Supplier's detailed coverage map, Speed and Coverage Template and modelling criteria for the deployment of the Network for the specified Coverage Area;			
2.21.5	details of the Supplier's project management processes including its procedures, standards, tools and documentation that it will use to deliver its Supplier Solution;			
2.21.6	details of the Supplier's quality management process, including standards, tools and key performance indicators that shall be used by the Supplier to deliver the Supplier Solution;			
2.21.7	the Supplier's project organisation and staffing including key roles and responsibilities;			
2.21.8	the type of project team availability (on site / back office / remotely / on call, etc) during the various project phases;			
2.21.9	a detailed project plan for each Phase including key planning information with respect to the design, build and testing of the Supplier Solution associated with each Milestone;			
2.21.10	details of the Wholesale Access Product and Service documentation to be provided by the Supplier to Retail Service Providers and the Local Body, such as functional and technical admin specifications and guides, training manuals, configuration and customisation manuals; and			
2.21.11	details of the Supplier's project finance management processes, including with respect to grant audit.			
2.22	During the term of the relevant Call Off Contract the Supplier shall provide assistance to the Local Body which may include:			
2.22.1	providing test validation reports;			
2.22.2	site visits;			
2.22.3	systems/records review;			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
2.22.4	field strength measurements and surveys;			
2.22.5	witnessing testing; and			
2.22.6	End User visits.			
Public sect	or and Community Network Requirements			
2.23	The following requirements apply only where a Local Body has included a specific public sector or community network requirement as part of the Service Requirements for a relevant Call Off Contract. The following establishes the associated minimum requirements to be met by the Supplier.			
2.23.1	The Supplier shall be capable of maintaining the separation, bandwidth and integrity of wholesale traffic if the Network is used by any RSP to provide a Public Enterprise Network or Enterprise Network, subject to non- duplication and other conditions stated in the State Aid Clearance;			
2.23.2	The Supplier shall ensure that for Cabinet Office Public Sector Networks, traffic separation practices and security on individual data streams are implemented.			
2.24	The Supplier shall provide, subject to the Change Control Procedure set out in the relevant Call Off Contract, a network access and data transport components service, as agreed with the Local Body, to communities requesting to extend Wholesale Access Products and Services connectivity and or to increase access line speeds, beyond the Supplier's originally planned Supplier Solution provided that such change falls within the State Aid Clearance.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
2.25	The Supplier shall support extensions to the Supplier Solution by offering and supporting a Community Build and Benefit scheme. Additionally, upon reasonable request, the Supplier may also support extensions to its NGA proposals by offering and supporting a Community Partnership Scheme and/or a Community Concession Scheme.			
2.26	The Supplier shall identify and provide connectivity to nominated points, where the local community (for example, a local authority, residential groups, local businesses) provides, builds and maintains its own access network. This is described as a community backhaul solution.			
	Note: Nothing under paragraphs 2.23 to 2.26 shall prevent a local community from sourcing services that are available outside of the relevant Call Off Contract that are capable of achieving similar objectives for the local community.			
Sustainabi	ity			
2.27	The Supplier shall as a minimum:			
2.27.1	roll out Deployed Services which are sustainable and comply with or exceed the UK Government sustainability targets, including SOGE and 'Greening Government ICT';			
2.27.2	ensure compliance with relevant environmental legislation; and			
2.27.3	in association with the Local Body develop, implement and operate the Supplier's plans to meet the Local Body targets, as agreed with the Supplier, for sustainability in accordance with the Local Body ITT when developing the Supplier Solution.			
Delivering	Take-up			
2.28	The Supplier shall provide Demand Stimulation in conjunction with its Retail Service Providers to drive Take-up, and as a minimum:			
2.28.1	the Supplier shall create and deliver within the timescales specified in the Project Plan a detailed marketing strategy and programme which supports the maximum Take-up during the term of the relevant Call Off Contract. As			

		Solution	Rationale	Mitigations and controls
Rqmt. ID	Requirement	Compliance	(where PC/NC)	to remove impact on solution
	a minimum the Supplier's Marketing Sales Plan shall provide for:			
	(a) white label generic unbranded marketing to encourage maximum business and residential Take-up;			
	(b) the establishment of a marketing and account resource to support Take-up;			
	(c) a range of marketing communications channels (examples: web, newspaper, radio, local community presentations, brochures, etc.) to ensure maximum coverage of information during the broadband implementation;			
2.28.2	the Supplier shall provide reports on the adoption by RSPs of Wholesale Access Products and Services in accordance with Schedule 6.4 (Reports) of the relevant Call Off Contract in order to enable monitoring of the success of the marketing plan;			
2.28.3	the Supplier, together with the Local Body, shall engage with local businesses, residents and communities to discuss an engagement and resourcing plan for Demand Stimulation in the identified target areas detailed in the relevant Call Off Contract and shall agree such plan with the Local Body; and			
2.28.4	the Supplier shall conduct such additional Demand Stimulation activities as may be requested and funded (in whole or in part) by the relevant Local Body.			
Wholesale	Access Products & Services Requirements			
4.1	The Wholesale Product Template shall set out the Supplier's range of Wholesale Products and Services which will be published and available to the Retail Service Providers, including the access products set out at requirement 4.4.			
4.2	Wholesale Access Products and Services shall support Retail Service Providers in gaining Take-up, excluding the impact the Retail Service Provider may have on the retail products and services consumed by the End User.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
4.3	The Supplier shall develop and configure new or existing Wholesale Access Products and Services on a regular basis throughout the term of the relevant Call Off Contract in line reasonable Retail Service Provider requirements and the goal of maximising Take-up.			
4.4	The Supplier shall meet the following minimum access requirements for the term of the relevant Call Off Contract in order to meet Commission Decision:			
4.4.1	Active layer: The Supplier shall offer wholesale products suitable to allow communication providers, including mobile communication providers to obtain effective bit stream access to the Supplier Solution (whether access or backhaul components) on commercially acceptable terms and consistent with the Commission Decision in regard to its commitments to open access. The Supplier shall document how multiple communication providers can use this and how capacity is managed between multiple communications providers.			
4.4.2	Physical assets: The Supplier shall offer wholesale products suitable to allow communication providers, including mobile communication providers to obtain effective access to various physical assets on commercially acceptable terms and consistent with the Commission Decision, in regard to its commitments to open access with:			
	(a) paragraphs 4.4.3 to 4.4.6 below relating to Duct Space, New Ducts and New Poles;			
	(b) paragraph 4.4.7 relating to existing infrastructure; and			
	(c) paragraph 4.4.8 relating to additional network access;			
	specifically covering how such types of access are addressed and consistent with the Commission Decision.			
	This obligation shall, as a minimum, apply to all infrastructure assets that have been subsidised by State aid. The Supplier shall document how multiple communication providers can use the physical assets and how			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	capacity is managed between multiple communications providers.			
4.4.3	Duct space: In the event of State aid funding for Superfast Broadband being used to build new, or augment existing, duct the relevant network operator will consider potential future demand for duct space, by itself and from alternative operators, and will design the size of the duct accordingly in order to minimise the likelihood of further duct enhancements being required.			
4.4.4	"New Duct" means that subsidised physical infrastructure located underground that is installed as part of the Deployed Services, where no existing duct infrastructure exists and where the duct deployment will have individual length of not less than 1.0km and have deployment costs of £50,000 or greater. New Duct includes that physical infrastructure deployed for the purposes of providing both access (from the local exchange or relevant point of presence to End User premises) and backhaul (from the core network to the relevant point of presence). "New Poles" means that subsidised physical infrastructure located above ground that is installed as part of the Deployed Services, where no existing pole infrastructure exists and where the poles will be deployed over a distance of not less than 1.0km and have deployment costs of £50,000 or greater. New Poles includes that physical infrastructure deployed for the purposes of providing both access (from the local exchange or relevant point of presence to End User premises) and backhaul (from the core network to the relevant point of presence). New Duct and New Poles excludes all existing duct and pole infrastructure (including all new sub-duct and new fibre tube deployed in that existing duct infrastructure), new duct and new poles deployed in lengths/values below the thresholds identified above, duct and poles subject to partial repair and ducts subject to clearing .			
4.4.5	New Ducts and New Poles must be:			
	offered on an Open Access and equality of access basis to all communications providers seeking to use that infrastructure; a. dimensioned in such a way as to offer effective shared access to at least three other competing communications providers, unless it is not			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	technically feasible to do so in relation to access to New Poles by any such communications providers; and			
	b. designed and dimensioned in a manner that is capable of accommodating and supporting reasonably foreseeable alternative technologies. For example, allows hosting of both point-to-point (P2P) and point-to-multipoint (P2M) technologies and ensures that the drop segment is designed and dimensioned to support these			
4.4.6	For the avoidance of doubt, requests for access to New Duct and New Pole infrastructure for a communications service include the supply of any type of wholesale local access and backhaul service used to supply residential and business markets (e.g. next generation access (NGA), leased lines, or radio base station backhaul			
4.4.7	Existing infrastructure: Where a communications provider is committed to investing in NGA infrastructure to facilitate the competitive delivery of retail superfast broadband within the part of Coverage Area in which the Supplier is selected to provide the Deployed Services by the Local Body, subject to 4.4.7 (A) up to and including 4.4.7(C) below, the Supplier must not prohibit or otherwise restrict the communications provider from using the Wholesale Access Products and Services that provide access to the Supplier's physical infrastructure within that part of the Coverage Area for the primary purpose of NGA deployment (the "Primary Purpose") and for the supplementary purpose of providing business connectivity services within that part of the Coverage Area (the "Supplementary Purpose").			
	a. In order to validate that the communications provider is committed to the Primary Purpose and for the Supplier to enable the Supplementary Purpose, the Parties acknowledge that the Supplier shall be entitled to require that the communications provider:			
	(i) submits a credible business plan for NGA investment for a mass market NGA offering to an independent expert (being such chartered accountants as agreed between the Supplier and the communications provider, or in default of agreement, as may be nominated by the			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	President of the Chartered Institute of Chartered Accountants in England and Wales) who shall assess and confirm whether the submitted plan clearly demonstrates a credible return on NGA investment for a mass market NGA provider. The business plan must, amongst other things be: • sustained by a material contribution in terms of NGA take up - the NGA business model the communications provider implements (covering proposals for products, pricing, marketing and take up) for a mass market NGA offering must be sustained by a material contribution in terms of NGA take up from superfast broadband services supplied to customers within that part of the Coverage Area. An example of such a material contribution for a mass market NGA offering might be one that is built on the effective targeting of approximately 25% of the customer base within that part of the Coverage Area i.e. having the network build and capacity to serve this extent of customers with NGA services and that this marketing would generate take-up of approximately 5% of such customer base; • based on NGA revenues as the prime source - revenues from other sources to bolster the implementation of such plan can be included by the communications provider but these cannot be the prime revenue source (i.e. revenues from such other sources cannot at any time be greater than the NGA revenues);			
	 based on margin positive customer connections - NGA customer connections would be expected to be margin positive. based on the communications provider being in a position to 			
	provide on demand a mass market NGA offering – the plan must include evidence which clearly demonstrates that the communications provider has an on demand mass market NGA offering, including sufficient:			
	built NGA network deployment;			
	 OSS/BSS facilities marketing; and 			
	• initial End User take up.			
	based on the Primary Purpose deployment being in			

conjunction with the Supplementary Purpose – the plan must demonstrate deployment of NGA for the Primary Purpose takes place in conjunction			to remove impact on solution
with the Supplementary Purpose.			
(ii) obtains confirmation from NCC and Ofcom whether or not the communications provider is required to offer wholesale bitstream access to further downstream competition in order to promote effective competition.			
b. The Supplier shall be entitled to subsequently request (on a regular basis but not more frequently than annually) that the communications provider submits evidence to an independent expert (being such chartered accountants as agreed between the Supplier and the communications provider, or in default of agreement, as may be nominated by the President of the Chartered Institute of Chartered Accountants in England and Wales) for such expert to confirm that the communications provider's revenues are consistent with the principles set out in 4.4.7 (a) (i) above, and that revenue from NGA is at all times in excess of that from all other sources ("Revenue Consistency Confirmation"). If the expert cannot provide Revenue Consistency Confirmation, the Supplier may at its sole discretion, in its agreement with the communications provider for the Supplementary Purpose:			
(i) suspend use for the Supplementary Purpose for new business connectivity services until such time as the communications provider submits evidence to such expert so the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension;			
(ii) if the communications provider fails to submit evidence to such expert within a reasonable period (specified by the Supplier) following such suspension so the expert can provide NGA Revenue Consistency Confirmation for that subsequent period, suspend use for the Supplementary Purpose for existing business connectivity services, until such time as the communications provider subsequently submits evidence to such expert so the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension; and			
	 (ii) obtains confirmation from NCC and Ofcom whether or not the communications provider is required to offer wholesale bitstream access to further downstream competition in order to promote effective competition. b. The Supplier shall be entitled to subsequently request (on a regular basis but not more frequently than annually) that the communications provider submits evidence to an independent expert (being such chartered accountants as agreed between the Supplier and the communications provider, or in default of agreement, as may be nominated by the President of the Chartered Institute of Chartered Accountants in England and Wales) for such expert to confirm that the communications provider's revenues are consistent with the principles set out in 4.4.7 (a) (i) above, and that revenue from NGA is at all times in excess of that from all other sources ("Revenue Consistency Confirmation"). If the expert cannot provide Revenue Consistency Confirmation, the Supplier may at its sole discretion, in its agreement with the communications provider for the Supplementary Purpose: (i) suspend use for the Supplementary Purpose for new business connectivity services until such time as the communications provider submits evidence to such expert so the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension; (ii) if the communications provider fails to submit evidence to such expert within a reasonable period (specified by the Supplier) following such suspension so the expert can provide NGA Revenue Consistency Confirmation for the supplier) following such suspension so the expert can provide NGA Revenue Consistency Confirmation for that subsequent period, suspend use for the Supplementary Purpose for existing business connectivity services, until such time as the communications provider submits evidence to such expert can provide NGA Revenue Consistency 	 (ii) obtains confirmation from NCC and Ofcom whether or not the communications provider is required to offer wholesale bitstream access to further downstream competition in order to promote effective competition. b. The Supplier shall be entitled to subsequently request (on a regular basis but not more frequently than annually) that the communications provider submits evidence to an independent expert (being such chartered accountants as agreed between the Supplier and the communications provider, or in default of agreement, as may be nominated by the President of the Chartered Institute of Chartered Accountants in England and Wales) for such expert to confirm that the communications provider's revenues are consistent with the principles set out in 4.4.7 (a) (i) above, and that revenue from NGA is at all times in excess of that from all other sources ("Revenue Consistency Confirmation,"). If the expert cannot provide Revenue Consistency Confirmation, the Supplier may at its sole discretion, in its agreement with the communications provider for the Supplementary Purpose for new business connectivity services until such time as the communications provider submits evidence to such expert so the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension; (ii) if the communications provider fails to submit evidence to such expert within a reasonable period (specified by the Supplier) following such suspension so the expert can provide NGA Revenue Consistency Confirmation for that subsequent period, suspend use for the Supplementary Supplier) following such suspensions on the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension; and 	 (ii) obtains confirmation from NCC and Ofcom whether or not the communications provider is required to offer wholesale bitstream access to further downstream competition in order to promote effective competition. b. The Supplier shall be entitled to subsequently request (on a regular basis but not more frequently than annually) that the communications provider submits evidence to an independent expert (being such chartered accountants as agreed between the Supplier and the communications provider, or in default of agreement, as may be nominated by the President of the Chartered Institute of Chartered Accountants in England and Wales) for such expert to confirm that the communications provider's revenues are consistent with the principles set out in 4.4.7 (a) (i) above, and that revenue from NGA is at all times in excess of that from all other sources ("Revenue Consistency Confirmation,"). If the expert cannot provide Revenue Consistency Confirmation, the Supplier may at its sole discretion, in its agreement with the communications provider for the Supplementary Purpose: (i) suspend use for the Supplementary Purpose for new business connectivity services until such time as the communications provider submits evidence to such expert so the expert can provide NGA Revenue Consistency Confirmation for the period since such suspension; (ii) if the communications provider fails to submit evidence to such expert within a reasonable period, suspend use for the Supplier) Howing such suspensions on the expert can provide NGA Revenue Consistency Confirmation for the subplier) of the Supplier) Purpose for existing business connectivity services, until such time as the communications provider the Supplementary Purpose for existing business connectivity services, until such time as the communications provider to such expert so the expert can provide RGA Revenue Consistency Confirmation for that subsequent period, suspend use for the Supplementary Purpose for existing business connectivity s

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	such services for the Supplementary Purpose during any suspension period invoked in relation to (i) and/or (ii) above (in respect of new or existing business, as applicable), declare a material breach of its agreement for the Supplementary Purpose and/or terminate the agreement allowing use for the Supplementary Purpose. c. Should the case for a request for legitimate access for the Supplementary Purpose by a communications provider be disputed by the Supplier and not accepted by the communications provider, the Supplier shall grant a right for the communications provider to raise such dispute with the NCC and Ofcom who shall jointly determine, in accordance with the Commission Decision and based on evidence provided by the independent expert appointed by the Supplier and the communications provider, whether the communications provider has provided sufficient evidence required under paragraph 4.4.7 (a) or 4.4.7 (b) as applicable. d. The Supplier shall include in its agreements with communications providers within the scope of this paragraph 4.4.7, requirements that: (i) each communications provider requests, on an annual basis, confirmation from the NCC and Ofcom as to whether or not that communications provider is required to offer wholesale bitstream access to further downstream competition in order to promote effective competition; and (ii) where NCC and Ofcom confirms that such access is required, the communications providers concerned shall make such wholesale bitstream access available			
4.4.8	Additional network access: The Supplier shall also offer other forms of wholesale access if and to the extent Ofcom has mandated it as a regulatory remedy pursuant to a full market review in the product and geographic markets where the subsidised infrastructure is situated. Other forms of access may include (without limitation) dark fibre access or splitter access, if required. If Ofcom mandates other forms of wholesale access in this way ("additional wholesale access products"), the Supplier shall provide such access on all existing and future infrastructure in receipt of public subsidy under the Commission Decision. At the Effective Date of this Framework Agreement it is anticipated that Ofcom would provide that:			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	(a) all reasonable costs of providing the additional wholesale access products would be met by access seekers;			
	(b) the products shall be used for the primary purpose of supplying broadband services; and			
	(c) the availability of the additional access products in the area covered by the subsidised infrastructure would be required in Ofcom's reasonable opinion to deliver sustainable competition in broadband services.			
	The additional access product requirements set out in this paragraph 4.4 shall continue for as long as the Ofcom remedy is in place. The Supplier shall document (technically, operationally, and commercially) how different unbundled access products could be provided with its Supplier Solution architecture			
	Additional network access: The Supplier shall also offer other forms of wholesale access if and to the extent Ofcom has mandated it as a regulatory remedy pursuant to a full market review in the product and geographic markets where the subsidised infrastructure is situated. Other forms of access may include (without limitation) dark fibre access or splitter access, if required. If Ofcom mandates other forms of wholesale access in this way ("additional wholesale access products"), the Supplier shall provide such access on all existing and future infrastructure in receipt of public subsidy under the Commission Decision. At the Effective Date of this Framework Agreement it is anticipated that Ofcom would provide that:			
	(a) all reasonable costs of providing the additional wholesale access products would be met by access seekers;			
	(b) the products shall be used for the primary purpose of supplying broadband services; and			
	(c) the availability of the additional access products in the area covered by the subsidised infrastructure would be required in Ofcom's reasonable opinion to deliver sustainable competition in broadband services.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	The additional access product requirements set out in this paragraph 4.4 shall continue for as long as the Ofcom remedy is in place. The Supplier shall document (technically, operationally, and commercially) how different unbundled access products could be provided with its Supplier Solution architecture			
4.4.9	Subject to paragraph 4.4.10, the Supplier shall provide a process for assessing and facilitating requests for additional forms of wholesale access, and the Supplier shall provide appropriate additional forms of wholesale access through this process where there is reasonable demand, in accordance with this paragraph 4.4.9 up to an including paragraph 4.4.18. The Supplier's process should mirror the existing condition relating to new network access under the UK's SMP regulatory framework (i.e. the Statement Of Requirements process) but take into account the following in its assessment of whether requests for additional forms of wholesale access represent a reasonable demand:			
	a. Costs – all reasonable costs of providing the new wholesale access products (including an appropriate contribution to the Supplier's commercial costs (less those costs paid for by public subsidy) in light of its own investment into the superfast broadband infrastructure) should be met by the access seeker(s);			
	 b. Competition – the introduction of the new wholesale access products should deliver sustainable and effective competition in the downstream market(s); and 			
	c. Purpose – the new wholesale access products should clearly address the broadband market failure (subject to paragraph 4.4.6) that led to the original intervention/obligation.			
4.4.10	The provisions of paragraph 4.4.11 up to and including paragraph 4.4.18 shall only apply where the Supplier at the Effective Date does not have an established process in place (i.e. a Statement of Requirements process) to meet the existing condition relating to new network access under the UK's SMP regulatory framework. Where the Supplier does have such an established process in place, requests made pursuant to the mirrored			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	process established pursuant to paragraph 4.4.9, shall not apply to areas outside of the Coverage Area.			
4.4.11	The Supplier shall, for the purposes of transparency, publish and adhere to reasonable guidelines in relation to requests for additional forms of wholesale access made to it in accordance with paragraph 4.4.9. Such guidelines shall detail: (a) the form in which such a request should be made; (b) the information that the Supplier requires in order to consider a request for additional forms of wholesale access; and (c) the time-scales in which such requests will be handled by the Supplier.			
4.4.12	These guidelines shall meet the following principles: (a) the process should be documented end-to-end; (b) the timescales for each stage of the process shall be reasonable; and (c) the criteria by which requests will be assessed shall be clearly identified.			
4.4.13	The Supplier shall keep these guidelines under review to ensure that they remain adequate for the purpose of assessing and facilitating requests for additional forms of wholesale access. Any changes to the guidelines must be agreed between the Supplier and the National Competency Centre.			
4.4.14	The Supplier shall, upon a reasonable request from a communications provider considering making a request for additional forms of wholesale access in accordance with paragraph 4.4.9, provide that communications provider with information so as to enable that communications provider to make a request for additional forms of wholesale access. Such information shall be provided within a reasonable period.			
4.4.15	On receipt of a written request for additional forms of wholesale access, the Supplier shall deal with the request in accordance with the guidelines described at paragraph 4.4.10 above. A modification of a request for additional forms of wholesale access that has previously been submitted to the Supplier, and rejected by the Supplier, shall be considered as a new request.			
4.4.16	The Supplier shall consider the following in its assessment of whether requests for additional forms of wholesale access represent a reasonable			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	 demand: a. Costs – all reasonable costs of providing the new wholesale access products (including an appropriate contribution to the Supplier's commercial costs (less those costs paid for by public subsidy) in light of its own investment into the superfast broadband infrastructure) should be met by the access seeker(s); b. Competition – the introduction of the new wholesale access products should deliver sustainable and effective competition in the downstream market(s); and 			
	c. Purpose – the new wholesale access products should clearly address the broadband market failure (subject to paragraph 4.4.6) that led to the original intervention/obligation.			
4.4.17	If the Supplier judges such requests for additional forms of wholesale access to be reasonable, then it shall provide such new wholesale access products in a reasonable timescale. The additional wholesale access requirements set out in this paragraph 4.4 shall continue in respect of such additional forms of wholesale access for the remainder of the Term.			
4.4.18	The Supplier shall offer, as part of its process, an escalation route whereby a communications provider may ask Ofcom to review the Supplier's decision and arbitrate on any disagreement between the Supplier and the communications provider in terms of the outcome of the assessment of the request and its offer (if any) of additional forms of wholesale access. The Supplier shall be bound by Ofcom's decision.			

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
Service Le	vel Category			
4.5	The Supplier Solution shall at all times meet or exceed the following Service Levels which together constitute the Minimum Service Requirements:			
4.5.1	 The Supplier shall provide minimum network availability and support for its Retail Service Providers which shall include: (a) Network availability of 99.5%, measured on a monthly basis and in accordance with Good Industry Practice; (b) Trouble to Resolve (T2R) (as defined in NICC ND1626) time of a maximum of two (2) Working Days; and (c) Technical support and customer care hours – 0800 to 1800 7 days a week. 			
4.5.2	The Supplier Solution shall enable the Retail Service Providers to provide End Users with order, installation and availability service levels, including as a minimum a provisioning order installation timescale of 90% of all orders completed in five (5) Working Days, unless otherwise agreed with the RSP and to be calculated on a monthly basis.			
4.6	In order to enable the Retail Service Providers to support the End User experience, the Supplier shall back up the achievement of the Service Levels set out in requirement 4.5 with appropriate service credits or similar mechanisms to compensate the Retail Service Providers in the event that the Supplier fails to achieve any of the Minimum Service Requirements.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.1	Not used.			
3.2	The Compliance Matrix shall set out the Supplier's compliance statement against requirements 3.3 to 3.9.			
3.3	The Solution Components shall have a lifespan and an upgrade path for the term of the relevant Call Off Contract.			
3.4	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the term of the relevant Call Off Contract.			
3.5	The Solution Components when configured together shall be capable of providing Wholesale Access Products and Services that underpin the broadband products and services offered by Retail Service Providers in the marketplace as at the Effective Date of this Framework Agreement.			
3.6	The Solutions Components shall support the following ALA (as defined in ALA ND 1644) classes of service - having taken account of the packet loss, delay, round trip delay, jitter and wander characteristics inherent in the Supplier Solution. For QoE and QoS harmonisation, NICC ND 1530 recommendations will be used as a guideline:			
3.6.1	(except satellite based access Solution Components) Class A Real time, delay sensitive, applications (e.g. voice);			
3.6.2	(except satellite based access Solution Components) Class B Streaming applications (e.g. video);			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.6.3	Class C Internet Data; and			
3.6.4	Class D Guest or 3rd party access.			
3.7	Throughout the term of the relevant Call Off Contract the Supplier shall ensure all Solution Components comply with the applicable Codes and Standards or achieve function/performance levels that are equivalent to or better than those provided for in terms of the purpose of such Codes and Standards including:			
3.7.1	All Solution Components whether independent or integrated as part of the Supplier Solution shall comply with all relevant ITU, IETF, NICC, Broadband-Forum (BBF), and IEEE standards appropriate to achieving a high quality data transport infrastructure capable of achieving the Minimum Service Requirements;			
3.7.2	All non-fixed line Solution Components (including radio, satellite or mobile broadband) shall comply with all relevant IEEE, ITU-T or 3GPP standards for the delivery of the data transport infrastructure. Solution Components using radio spectrum shall have the relevant certificates proving the right to use; and			
3.7.3	All Ethernet based Solution Components shall, as part of a Supplier Solution, comply with the relevant NICC - ALA profiles and NICC B2B specifications.			

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
3.8	The Solution Components shall independently, and as part of a Supplier Solution, be capable of meeting the requirements of the acceptance criteria detailed in the Test Strategy. These shall include, at a minimum:			
3.8.1	interoperability tests;			
3.8.2	operations tests, including end to end testing of BSS, OSS and Network;			
3.8.3	performance tests;			
3.8.4	operations readiness tests, including monitoring, failovers; and			
3.8.5	other relevant technology-specific tests.			
3.9	The Supplier shall maintain, and when appropriate publish to Retail Service Providers a technical release schedule for each Solution Component which supports new software and hardware changes to continue service delivery with equal or higher quality and/or performance.			