

# Invitation to Tender

## OJEU OPEN PROCEDURE

OJEU Contract Notice: **NCCT41552**

## ITT Part 2: Appendix 5 – Compliance Matrix

Date: July 2018

Version: 1

Status: Final



**SUPERFAST  
BRITAIN**

**Bidder Instructions:**

1. The compliance matrix MUST be completed by the Bidder to reflect the compliance of its Solution with the Local Body's requirements.
2. The Bidder MUST complete: (i) a Solution Compliance table; and (ii) a Component Compliance table for each of their Solution Components.
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.

# Table of Contents

- [1 Solution Compliance](#)
- [2 Component Compliance 1](#)
- [3 Component Compliance 2](#)
- [4 Component Compliance 3](#)
- [5 Component Compliance 4](#)
- [6 Component Compliance 5](#)
- [7 Component Compliance 6](#)

# 1 Solution Compliance

Rqmt. ID	Requirement	Solution Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
<b>Solution Requirements</b>				
1.	<b>STATE AID REQUIREMENTS</b>			
1.1	The Supplier Solution must be compliant with the Commission Decision.			
1.2	The Supplier Solution must comprise and, in accordance with the Service Requirements, provide Next Generation Access infrastructure utilising qualifying NGA technologies capable of delivering broadband services with a download speed of at least 30 Mbps.			
1.3	The Supplier Solution must deliver a Network which represents a Step Change in terms of broadband availability. Step Change can be achieved by demonstration of all the following:			
1.3.1	Speeds have to be at least doubled by the intervention and substantially higher upload speeds provided when compared with existing upload and download speeds;			
1.3.2	Significant new investments in the broadband network are undertaken (i.e. investments that must include civil works and installation of new passive elements); and			
1.3.3	The new infrastructure brings significant new capabilities to the market in terms of broadband service availability, capacity and speeds and or competition.			
1.4	The Wholesale Access Products and Services made available by the Supplier shall comply with the requirements of the Commission Decision <a href="http://ec.europa.eu/competition/state_aid/cases/263954/263954_1760_328_135_4.pdf">http://ec.europa.eu/competition/state_aid/cases/263954/263954_1760_328_135_4.pdf</a> recognising that the specific requirements vary			

	depending on the specific configuration of the network and the qualifying technologies utilised.			
1.5	The Supplier must provide:			
1.5.1	Open Access to the Network;			
1.5.2	Wholesale Access Products and Services on an open, fair, reasonable, equal and non-discriminatory basis, as further described in paragraph 5 of this Schedule 2. The pricing of these Wholesale Access Products and Services shall be benchmarked in accordance with Schedule 5.2 (Wholesale Access Pricing), which benchmarking process shall be applied in a manner consistent with Paragraphs 134 to 138 of the Commission Decision.			
1.6	The Supplier Solution should seek to utilise existing infrastructure and facilities where it is technically feasible, cost effective and commercially viable to do so. This can be achieved through:			
1.6.1	Use of own infrastructure;			
1.6.2	Use of another supplier's infrastructure;			
1.6.3	Use of other utilities infrastructure.			
1.6.4	Use of Authority assets where identified in Schedule 4.2 (Authority Assets) of the Contract			
	The Supplier shall on request by the Authority confirm the extent that it is currently reusing and will reuse existing infrastructure and facilities as part of the Supplier Solution.			
2.	<b>SOLUTION REQUIREMENTS</b>			
2.1	The Supplier Solution shall be an Open Access Network which supports the UK's broadband policy objectives and the Local Body's objectives			

	by providing Retail Service Providers the Wholesale Access Products and Services through Solution Components that can support Take-up.			
2.2	<p>The Supplier Solution must provide NGA Broadband, Ultrafast Broadband and Gigabit Broadband to the:</p> <ul style="list-style-type: none"> <li>the volumes of End User Premises designated per Speed Category (being Speed Categories within the ranges of NGA, Ultrafast Broadband or Gigabit Broadband as applicable) – cumulative level criteria; and</li> <li>those identified End User Premises designated to Speed Categories within the ranges of NGA, Ultrafast Broadband or Gigabit Broadband (as applicable) – identified NGA End User Premises level criteria,</li> </ul> <p>as set out in the Speed and Coverage Template, including providing the allocated speeds specified in that Speed and Coverage Template to those identified End User Premises within any designated Priority Areas.</p>			
2.3	The Supplier shall (i) work with the Authority and Programme Authority; and (ii) co-operate with other suppliers and utility providers, to ensure delivery of the Supplier's Solution and to enable the efficient delivery of other related or interfacing publicly subsidised broadband network programmes (supporting the UK Government's broadband policy objectives).			
2.4	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.			
2.5	The Supplier shall implement, operate and maintain the Supplier Solution to provide Wholesale Access Products and Services delivering to the End User Premises specified in the Speed and Coverage Template:			

2.5.1	the corresponding level of Access Line Speed provided under paragraph 3.2;			
2.5.2	a minimum of a doubling of download speeds overall across the Network when compared to the existing speed category data in the Speed and Coverage Template and substantially higher upload speeds overall across the Network when compared with the Ofcom reference data published at the time the Authority issued the ITT;			
2.5.3	a minimum Busy Hour Committed Rate for each End User Premise of 15Mbps;			
2.5.4	the capability (without requiring the Supplier to mandate this to Retail Service Providers) for an installation to be completed by a Retail Service Provider based on a Retail Service Provider's standard installation charges, with no excess installation charges payable by the Retail Service Provider to the Supplier;			
2.5.5	ensuring that capacity is managed for the duration of the Term so that any End User Premises can place an order with a Retail Service Provider which can be provisioned in accordance with the Service Levels set out in paragraph 5.1.2;			
2.5.6	ensuring that the service provided to the End User Premises continues to meet the criteria set out in paragraphs 3.5.1 to 3.5.5 for the duration of the Term following Achievement of the corresponding Milestone Type M2 under which each relevant End User Premises is served; and			
2.5.7	such that Wholesale Access Products and Services are provided at charges which allow Retail Service Providers to provide affordable NGA, Ultrafast Broadband and Gigabit Broadband services to End Users.			
3.	<b>COMMUNITY NETWORK REQUIREMENTS</b>			
3.1	The following requirements apply only where the Authority has included a specific Local Community Project requirement as part of the Service			

	Requirements for this Contract. The following establishes the associated minimum requirements to be met by the Supplier.			
3.2	The Supplier shall provide, subject to the Change Control Procedure, a network access and data transport components service, as agreed with the Authority, 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 Commission Decision			
3.3	The Supplier shall support extensions to the Supplier Solution by offering and supporting a Local Community Project. Additionally, upon reasonable request, the Supplier may also support extensions to its NGA proposals by supporting a Community Contribution Scheme			
3.4	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.			
3.5	The Supplier shall in respect of any Local Community Project:			
3.5.1	proactively and effectively engage, interact with and inform each local community to ensure a proper and successful delivery; and			
3.5.2	work with the local community to define a set of Local Community Requirements subject to such requirements being incorporated to this Contract via the Change Control Procedure.			
3.6	Nothing under paragraph 4 of Schedule 2 shall prevent a local community from sourcing services that are available outside of this Contract and which are capable of achieving similar objectives for the local community.			



4.	<b>SERVICE LEVEL CATEGORY</b>			
4.1	The Supplier Solution shall at all times meet or exceed the following service levels which together constitute the Minimum Service Requirements:			
4.1.1	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.			
4.1.2	The Supplier Solution for NGA, Ultrafast Broadband and Gigabit Broadband Wholesale Access Product and Services shall be deployed by the Supplier in a manner that will ensure when a retail service is requested by a Retail Service Provider that such orders can be provisioned to End Users with order, installation and availability service levels, including as a minimum a provisioning order installation timescale assessed separately on a per Wholesale Access Product and Service basis of 80% of all orders completed in ten (10) Working Days and 100% of all orders completed in twenty (20) Working Days, as calculated on a monthly basis.			
4.1.3	The Supplier Solution for Wholesale Access Product and Service in respect of Wholesale Passive Products, shall ensure provision of such services in accordance with the corresponding order, installation and availability services levels as specified in the Wholesale Product Template.			
4.2	In order to enable the Retail Service Providers to support the End User experience, the Supplier shall back up the achievement of the Minimum Service Requirements with appropriate service credits or similar			

	mechanisms to incentivise performance and compensate the Retail Service Providers in the event that the Supplier fails to achieve any of the Minimum Service Requirements.			
4.3	The Supplier Solution shall provide integrated network access and data transport components to End User Premises and Handover Points that comply with all relevant Industry 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.			
4.4	The Supplier shall mitigate and minimise, in accordance with Good Industry Practice, the number of single points of failure within the Network.			
4.5	The Supplier Solution shall be capable of enabling Symmetrical services for RSPs.			
4.6	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 unnecessary further creation of infrastructure assets by itself or alternative operators.			
5.	<b>OPERATIONS</b>			
5.1	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).			
5.2	The Supplier shall provide a Lead-to-Cash Process to support Retail Service Providers which, as a minimum, shall include the following:			
5.2.1	order entry;			

5.2.2	order fulfilment such as line testing;			
5.2.3	distribution;			
5.2.4	billing and invoicing; and			
5.2.5	buyer payment/collection.			
5.3	The Supplier Solution shall include capabilities so as to be able to service MACDs.			
5.4	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:			
5.4.1	maintaining network inventory (including both physical and logical);			
5.4.2	providing communications providers with location-based, capacity management information for all offered products on subsidised infrastructure;			
5.4.3	provisioning services;			
5.4.4	configuring network components;			
5.4.5	monitoring and managing performance using relevant performance indicators;			
5.4.6	monitoring and managing faults;			
5.4.7	trouble-ticketing; and			
5.4.8	service assurance.			
5.5	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 Contract 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 or equivalent Industry Standards.			
5.7	The Supplier shall operate a BSS, which as a minimum shall include the following B2B processes:			
5.7.1	RSP contact service;			
5.7.3	customer relationship management;			
5.7.5	order management;			
5.7.7	order fulfilment;			
5.7.9	service activation; and			
5.7.11	billing and invoicing.			
5.8	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.			
5.9	The Supplier shall provide a service management model which describes the processes and communication needed to address disputes with and complaints from Retail Service Providers, including a dispute escalation procedure.			
5.10	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 Industry Standards, or achieve functions/performance levels that are equivalent to or better than those standards.			
5.11	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.			

5.12	The Supplier shall report on Take Up, RSP availability, active wholesale connections and average end user pricing as set out in Schedule 6.4 of the Contract.			
6.	<b>PROJECT DELIVERY</b>			
6.1	The Supplier shall roll out the Network and its Wholesale Access Products and Services in accordance with this Contract and in doing so shall:			
6.1.1	adopt a standard project management approach;			
6.1.2	meet, communicate and co-operate with the Authority as required in accordance with this Contract to allow the Authority to adequately understand progress of the project, achievement of Milestones and associated issues and risks;			
6.2	The Supplier shall, where the Authority's investment includes European Regional Development Fund (ERDF) funds, meet standards required by ERDF as identified in Schedule 5.5 (External Funding) of this Contract.			
6.3	The Supplier Solution shall include;			
6.3.1	the agreed and defined Milestones for delivery of the Supplier Solution.			
6.3.2	the timetable for the preparation and delivery of the Supplier's detailed marketing strategy;			
6.3.3	the Supplier's change management process for change to the Project Plan, an example of which could be the rollout delivery phasing;			
6.3.4	details of the Supplier's project management processes including its procedures, standards, tools and documentation that it will use to deliver its Supplier Solution;			

6.3.5	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;			
6.3.6	the Supplier's project organisation and staffing including key roles and responsibilities;			
6.3.7	the type of project team availability (on site / back office / remotely / on call, etc.) during the various project phases;			
6.3.8	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;			
6.3.9	details of the Wholesale Access Product and Service documentation to be provided by the Supplier to Retail Service Providers and the Authority, such as functional and technical admin specifications and guides, training manuals, configuration and customisation manuals; and			
6.3.10	details of the Supplier's project finance management processes, including with respect to audit			
6.4	The Supplier shall produce and maintain suitable documentation, information and records such that it can at all times demonstrate to the Authority on request that the Supplier Solution will provide the required Network performance as specified in the Supplier Solution, which shall include:			
	In the case of a fibre based solution			
6.4.1	A list of Structures to be built under the Supplier Solution;			
6.4.2	The network design, topology and element dimensioning			
6.4.3	The list of NGA white premises and applicable postcodes for each Structure			

	In the case of a wireless based solution			
6.4.4	The network design, topology and element dimensioning			
6.4.5	Radio and interference plans that are specific to the proposed technologies;			
6.4.6	Frequency plan;			
6.4.7	The list of NGA white Premises and applicable postcodes that will receive an NGA solution.			
6.5	During the term of this Contract the Supplier shall provide assistance to the Authority which may include:			
6.5.1	test validation reports;			
6.5.2	Site visits;			
6.5.3	systems/records review;			
6.5.4	field strength measurements and surveys;			
6.5.5	witnessing testing; and			
6.5.6	End User visits.			
7.	<b>SUSTAINABILITY</b>			
	The Supplier shall as a minimum:			
7.1.1	roll out Deployed Services which are sustainable and comply with or exceed the UK Government sustainability targets, including SOGE and 'Greening Government ICT';			
7.1.2	ensure compliance with relevant environmental legislation; and			

7.1.3	in association with the Authority develop, implement and operate the Supplier's plans to meet the Authority targets, as agreed with the Supplier, for sustainability in accordance with the Authority's ITT when developing the Supplier Solution.			
8.	<b>DELIVERING TAKE-UP</b>			
8.1	The Supplier shall create and deliver within the timescales specified in the Project Plan a detailed marketing strategy (including a programme of activities) which supports the maximum Take-up during the term of this Contract for NGA, Ultrafast Broadband and Gigabit Broadband.			
8.2	As a minimum the Supplier's Marketing Strategy shall provide for:			
8.2.1	white label generic unbranded marketing to encourage maximum business and residential take up;			
8.2.2	white label generic unbranded marketing approaches for NGA, Ultrafast Broadband and Gigabit Broadband campaigns;			
8.2.3	the establishment of a marketing and account resource to support Take Up;			
8.2.4	a range of marketing communications channels (examples: web, newspaper, radio, brochures, stickers etc.) to ensure maximum coverage of information during the NGA, Ultrafast Broadband and Gigabit Broadband implementation.			
8.3	The Supplier methodology for measuring both NGA, Ultrafast Broadband and Gigabit Broadband Take Up and how delivery will be validated and shared with the Authority is set out in Schedule 3.1 (Supplier Solution).			
8.4	The Supplier shall provide reports on the adoption by RSPs of Wholesale Access Products and Services in accordance with Schedule 6.4 (Reports) of this Contract in order to enable monitoring of the success of the Marketing Strategy.			



8.5	The Supplier, together with the Authority, 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 this Contract.			
8.6	The Supplier shall conduct such additional Demand Stimulation activities as may be requested and funded jointly between the Parties.			
	<b>WHOLESALE ACCESS PRODUCTS AND SERVICES</b>			
9.1	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 any new forms of access granted pursuant to paragraph 11.6 of Schedule 2 of the Contract.			
9.2	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.			
9.3	The Supplier shall develop and configure new or existing Wholesale Access Products and Services on a regular basis throughout the Term in line with reasonable Retail Service Provider requirements and the goal of maximising Take-up.			
9.4	The Supplier shall offer technologically neutral Wholesale Products and Services:			
9.4.1	suitable to allow access seekers to obtain effective Open Access on fair, reasonable and non-discriminatory terms;			
9.4.2	consistent with the Service Requirements;			

9.4.3	consistent with the Commission Decision, in particular with regard to paragraphs 122 to 127 of the Commission Decision.			
	This obligation shall, as a minimum, apply to all infrastructure assets in the Coverage Area that have been subsidised by State aid as well as all existing infrastructure in the Coverage Area that is used in the deployment of the subsidised network . The Supplier shall document how multiple communication providers can use the physical assets and how capacity is managed between multiple communications providers which shall include the requirement for notification of such requests to the Authority prior to such other form of wholesale access being provided by the Supplier to the access seeker.			
9.5	Specific Forms of Network Access: In all cases the Supplier must make available from the point of deployment the forms of physical access as identified in paragraph 126 of the Commission Decision.			
9.6	General forms of new network access: In all cases the Supplier must make available other forms of wholesale access in accordance with paragraph 127 of the Commission Decision, insofar as it relates to Open Access procurement. The Parties shall agree and apply a process for receipt and handling of applications for new forms of network access.			
9.7	Where the circumstances described in Paragraphs 139 and 140 of the Commission Decision occur, any supplementary or increased regulatory requirements supplementary access requirements shall be deemed automatically included in this Schedule 2 of the Contract.			

## 2 Component Compliance 1

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	<b>SOLUTION COMPONENT REQUIREMENTS</b>			
	The following requirements relate to the Solution Components as detailed in the Solution Components Template as part of the Supplier Solution.			
10.1	The Solution Components shall have a lifespan and an upgrade path for the Term. The Supplier shall report (where applicable) on advances and opportunities for trials or piloting of new NGA qualifying technology through the governance arrangements set out in Schedule 6.1 (Governance) of the Contract, for consideration for inclusion under this Contract (subject to Commission Decision and procurement constraints)			
10.2	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the Term.			
10.3	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.			

10.4	The Solution Components shall support the following ALA (as defined in ALA ND 1644) classes of service or the equivalent Industry Standard:			
10.4.1	Class A Real time, delay sensitive, applications (e.g. voice);			
10.4.2	Class B Streaming applications (e.g. video);			
10.4.3	Class C Internet Data; and			
10.4.4	Class D Guest or 3rd party access,			
	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 1030 recommendations will be used as a guideline.			
10.5	Throughout the Term the Supplier shall ensure all Solution Components comply with the applicable Industry Standards or achieve function/performance levels that are equivalent to or better than those standards.			
10.6	The Solution Components shall independently, and as part of the Supplier Solution, be capable of meeting the requirements for technical acceptance detailed in the Test Strategy. These shall include, at a minimum:			
10.6.1	interoperability tests;			
10.6.2	operations tests, including end to end testing of BSS, OSS and Network;			
10.6.3	performance tests;			
10.6.4	operations readiness tests, including monitoring, failovers; and			

10.6.5	other relevant technology-specific tests.			
10.7	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.			

### 3 Component Compliance 2

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
	<b>SOLUTION COMPONENT REQUIREMENTS</b>			
	The following requirements relate to the Solution Components as detailed in the Solution Components Template as part of the Supplier Solution.			
11.1	The Solution Components shall have a lifespan and an upgrade path for the Term. The Supplier shall report on advances and opportunities for trials or piloting of new NGA qualifying technology through the governance arrangements set out in Schedule 6.1 (Governance) of the Contract, for consideration for inclusion under this Contract (subject to Commission Decision and procurement constraints)			
11.2	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the Term.			
11.3	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.			

11.4	The Solution Components shall support the following ALA (as defined in ALA ND 1644) classes of service or the equivalent Industry Standard:			
11.4.1	Class A Real time, delay sensitive, applications (e.g. voice);			
11.4.2	Class B Streaming applications (e.g. video);			
11.4.3	Class C Internet Data; and			
11.4.4	Class D Guest or 3rd party access,			
	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 1030 recommendations will be used as a guideline.			
11.5	Throughout the Term the Supplier shall ensure all Solution Components comply with the applicable Industry Standards or achieve function/performance levels that are equivalent to or better than those standards.			
11.6	The Solution Components shall independently, and as part of the Supplier Solution, be capable of meeting the requirements for technical acceptance detailed in the Test Strategy. These shall include, at a minimum:			
11.6.1	interoperability tests;			
11.6.2	operations tests, including end to end testing of BSS, OSS and Network;			
11.6.3	performance tests;			
11.6.4	operations readiness tests, including monitoring, failovers; and			

11.6.5	other relevant technology-specific tests.			
11.7	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.			



#### 4 Component Compliance 3

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
12.	<b>SOLUTION COMPONENT REQUIREMENTS</b>			
	The following requirements relate to the Solution Components as detailed in the Solution Components Template as part of the Supplier Solution.			
12.1	The Solution Components shall have a lifespan and an upgrade path for the Term. The Supplier shall report on advances and opportunities for trials or piloting of new NGA qualifying technology through the governance arrangements set out in Schedule 6.1 (Governance) of the Contract, for consideration for inclusion under this Contract (subject to Commission Decision and procurement constraints)			
12.2	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the Term.			
12.3	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.			
12.4	The Solution Components shall support the following ALA (as defined in ALA ND 1644) classes of service or the equivalent Industry Standard:			

12.4.1	Class A Real time, delay sensitive, applications (e.g. voice);			
12.4.2	Class B Streaming applications (e.g. video);			
12.4.3	Class C Internet Data; and			
12.4.4	Class D Guest or 3rd party access,			
	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 1030 recommendations will be used as a guideline.			
12.5	Throughout the Term the Supplier shall ensure all Solution Components comply with the applicable Industry Standards or achieve function/performance levels that are equivalent to or better than those standards.			
12.6	The Solution Components shall independently, and as part of the Supplier Solution, be capable of meeting the requirements for technical acceptance detailed in the Test Strategy. These shall include, at a minimum:			
12.6.1	interoperability tests;			
12.6.2	operations tests, including end to end testing of BSS, OSS and Network;			
12.6.3	performance tests;			
12.6.4	operations readiness tests, including monitoring, failovers; and			
12.6.5	other relevant technology-specific tests.			
12.7	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.			

## 5 Component Compliance 4

Rqmt ID	Solution Component Requirements	Solution Component Compliance	Rationale (where PC/NC)	Mitigations and controls to remove impact on solution
13.	<b>SOLUTION COMPONENT REQUIREMENTS</b>			
	The following requirements relate to the Solution Components as detailed in the Solution Components Template as part of the Supplier Solution.			
13.1	The Solution Components shall have a lifespan and an upgrade path for the Term. The Supplier shall report on advances and opportunities for trials or piloting of new NGA qualifying technology through the governance arrangements set out in Schedule 6.1 (Governance) of the Contract, for consideration for inclusion under this Contract (subject to Commission Decision and procurement constraints)			
13.2	The Solution Components, including data transport components, shall be upgradable so as to support increasing access line speeds throughout the Term.			
13.3	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.			
13.4	The Solution Components shall support the following ALA (as defined in ALA ND 1644) classes of service or the equivalent Industry Standard:			

13.4.1	Class A Real time, delay sensitive, applications (e.g. voice);			
13.4.2	Class B Streaming applications (e.g. video);			
13.4.3	Class C Internet Data; and			
13.4.4	Class D Guest or 3rd party access,			
	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 1030 recommendations will be used as a guideline.			
13.5	Throughout the Term the Supplier shall ensure all Solution Components comply with the applicable Industry Standards or achieve function/performance levels that are equivalent to or better than those standards.			
13.6	The Solution Components shall independently, and as part of the Supplier Solution, be capable of meeting the requirements for technical acceptance detailed in the Test Strategy. These shall include, at a minimum:			
13.6.1	interoperability tests;			
13.6.2	operations tests, including end to end testing of BSS, OSS and Network;			
13.6.3	performance tests;			
13.6.4	operations readiness tests, including monitoring, failovers; and			
13.6.5	other relevant technology-specific tests.			
13.7	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.			

## 6 **Component Compliance 5**

*[Not Used]*

## 7 **Component Compliance 6**

*[Not used]*