

# SIP Trunking

## Multi endpoint order form

Company name<sup>(1)</sup>Contract type<sup>(2)</sup>Quote reference<sup>(3)</sup>

Pence per minute (ppm): When you just want to pay for what you use no minutes bundle need be purchased. In this case you will pay for all calls at the ppm rates defined in the rate card or in your O<sub>2</sub> contract. This tariff is shown as STRPPM on your O<sub>2</sub> bill.

UK domestic bundle: This bolt-on option provides inclusive calls to 01, 02, 03 numbers (subject to a 5,000 minute per channel per month fair usage policy). This tariff is shown as STRAAA on your O<sub>2</sub> bill.

UK domestic and mobile bundle: This bolt-on option provides inclusive calls to 01,02, 03 (subject to a 5,000 minute per channel per month fair usage policy) and 07 (mobile) numbers (subject to a 2,000 minute per channel per month fair usage policy and three year contract term). This tariff is shown as STRAAM on your O<sub>2</sub> bill.

Managed acceptance testing<sup>(4)</sup>

Managed acceptance testing includes service acceptance testing.

No of SIP endpoints<sup>(5)</sup>Endpoint build option<sup>(9)</sup>Contact name<sup>(6)</sup>Contact number<sup>(6)</sup>Email address<sup>(6)</sup>Job title<sup>(6)</sup>**Semafone enabled SIP Trunking**

If 'Semafone enabled SIP Trunking' please confirm the following details.

Deployment type<sup>(100)</sup>Semafone build<sup>(103)</sup>Contact name<sup>(101)</sup>Email address<sup>(101)</sup>Contact number<sup>(101)</sup>3<sup>rd</sup> party<sup>(102)</sup>**Instructions:**

This order form is for a new Multi SIP endpoint over ethernet order and is submitted to your O<sub>2</sub> account team. An order form guide is also available from the following [location](#).

Additional order forms flavours are available at [www.o2.co.uk/business/sip-trunking](http://www.o2.co.uk/business/sip-trunking).

To request additional new number(s) or the porting of existing numbers with this order form please also complete.

- New number customer request [form](#)
- Port a number customer request [form](#)
- This order form includes the request for one DDI range, additional DDI ranges or be-spoke number selection can be requested via the following customer request [form](#)
- If a DDI range isn't requested on this order form a single DDI will be provisioned for test purposes.
- SIP header format can be view at the following [location](#).
- Semafone enabled SIP Trunking is not available in all markets.

# SIP Trunking

## Multi endpoint order form

### SIP address

Please confirm the business address details via <https://www.royalmail.com/find-a-postcode>.  
End user details, where possible please provide a 24 hour contact

Site A	Premise <sup>(7)</sup>	<input type="text"/>	End User first name <sup>(8)</sup>	<input type="text"/>
	Street/throughfare <sup>(7)</sup>	<input type="text"/>	End User last name <sup>(8)</sup>	<input type="text"/>
	Town/locality <sup>(7)</sup>	<input type="text"/>	Job title <sup>(8)</sup>	<input type="text"/>
	Country code <sup>(7)</sup>	GB	Telephone <sup>(8)</sup>	<input type="text"/>
	Postcode <sup>(7)</sup>	<input type="text"/>	Mobile number <sup>(8)</sup>	<input type="text"/>
			Email <sup>(8)</sup>	<input type="text"/>
Site B	Premise <sup>(7)</sup>	<input type="text"/>	End User first name <sup>(8)</sup>	<input type="text"/>
	Street/throughfare <sup>(7)</sup>	<input type="text"/>	End User last name <sup>(8)</sup>	<input type="text"/>
	Town/locality <sup>(7)</sup>	<input type="text"/>	Job title <sup>(8)</sup>	<input type="text"/>
	Country code <sup>(7)</sup>	GB	Telephone <sup>(8)</sup>	<input type="text"/>
	Postcode <sup>(7)</sup>	<input type="text"/>	Mobile number <sup>(8)</sup>	<input type="text"/>
			Email <sup>(8)</sup>	<input type="text"/>
Site C	Premise <sup>(7)</sup>	<input type="text"/>	End User first name <sup>(8)</sup>	<input type="text"/>
	Street/throughfare <sup>(7)</sup>	<input type="text"/>	End User last name <sup>(8)</sup>	<input type="text"/>
	Town/locality <sup>(7)</sup>	<input type="text"/>	Job title <sup>(8)</sup>	<input type="text"/>
	Country code <sup>(7)</sup>	GB	Telephone <sup>(8)</sup>	<input type="text"/>
	Postcode <sup>(7)</sup>	<input type="text"/>	Mobile number <sup>(8)</sup>	<input type="text"/>
			Email <sup>(8)</sup>	<input type="text"/>
Site D	Premise <sup>(7)</sup>	<input type="text"/>	End User first name <sup>(8)</sup>	<input type="text"/>
	Street/throughfare <sup>(7)</sup>	<input type="text"/>	End User last name <sup>(8)</sup>	<input type="text"/>
	Town/locality <sup>(7)</sup>	<input type="text"/>	Job title <sup>(8)</sup>	<input type="text"/>
	Country code <sup>(7)</sup>	GB	Telephone <sup>(8)</sup>	<input type="text"/>
	Postcode <sup>(7)</sup>	<input type="text"/>	Mobile number <sup>(8)</sup>	<input type="text"/>
			Email <sup>(8)</sup>	<input type="text"/>

# SIP Trunking

## Multi endpoint order form

### Endpoint details

Endpoint build option<sup>(9)</sup>

Build Option<sup>(11)</sup>  IP addressing Range<sup>(12)</sup>

O<sub>2</sub> will allocate the following IP address ranges in the form fields Endpoint IP address<sup>(13)</sup> is completed internally within O<sub>2</sub>. By default, SIP end-points with dedicated connectivity are built using allocated private IP addressing from 10.10.x.x range.

Endpoint site A IP address<sup>(13)</sup>  Endpoint A hardware<sup>(14)</sup>

Endpoint site B IP address<sup>(13)</sup>  Endpoint B hardware<sup>(14)</sup>

Endpoint site C IP address<sup>(13)</sup>  Endpoint C hardware<sup>(14)</sup>

Endpoint site D IP address<sup>(13)</sup>  Endpoint D hardware<sup>(14)</sup>

If your SIP hardware option isn't included in the dropdown list please completed the bespoke CPE section.

Bespoke CPE type<sup>(15)</sup>  Bespoke CPE model<sup>(15)</sup>

Bespoke CPE vendor<sup>(15)</sup>  Bespoke software version<sup>(15)</sup>

### Access and channels

Access via O<sub>2</sub> Gateway<sup>(16)</sup>

Endpoint site A access type<sup>(17)</sup>  Endpoint site A channels<sup>(18)</sup>

Endpoint site B access type<sup>(17)</sup>  Endpoint site B channels<sup>(18)</sup>

Endpoint site C access type<sup>(17)</sup>  Endpoint site C channels<sup>(18)</sup>

Endpoint site D access type<sup>(17)</sup>  Endpoint site D channels<sup>(18)</sup>

### Codec

Primary codec<sup>(19)</sup>  Fax(T.38)<sup>(23)</sup>

Primary packetisation<sup>(20)</sup>  The O<sub>2</sub> SIP Trunking service will support fax and modem transmission subject to the following constraints. Fax and modem transport in band using G.711 a-law codec is supported. Renegotiation to T.38 is supported (subject to interoperability testing). The use of G.729 for in-band faxes is not supported, as its compressed nature may cause tones and messages to be lost.

Secondary codec<sup>(21)</sup>

Secondary packetisation<sup>(22)</sup>

The same CODEC configuration will be applied to all SIP endpoints. The primary and secondary codec must be different to apply a secondary codec. If both codec(s) are the same only a primary codec will be applied.

# SIP Trunking

## Multi endpoint order form

### Outbound call barring

As standard outbound calls to international and premium rate numbers are blocked. If you require to support call terminations to International and / or premium rate numbers, please ensure this option is un-checked.

No call barring <sup>(24)</sup>	<input type="checkbox"/>	All check call options will be barred.	
International call barring <sup>(25)</sup>	<input type="checkbox"/>	Mobile call barring (071-079) <sup>(26)</sup>	<input type="checkbox"/>
Premium number barring (09) <sup>(27)</sup>	<input type="checkbox"/>	Personal number calls barred <sup>(070)(28)</sup>	<input type="checkbox"/>
Special services calls up to 7 ppm <sup>(084)(29)</sup>	<input type="checkbox"/>	Special services calls up to 13 ppm <sup>(087)(30)</sup>	<input type="checkbox"/>
Directory enquiries calls barred <sup>(118)(31)</sup>	<input type="checkbox"/>	All call calling inc 01,02,03,08 and shortcodes <sup>(32)</sup>	<input type="checkbox"/>

### Network fraud management

Do you require network fraud management<sup>(33)</sup>

Daily spend limit <sup>(34)</sup>	<input type="text"/>	Spending must not exceed this value in any 24 hour period
Weekly spend limit <sup>(35)</sup>	<input type="text"/>	Spending must not exceed this value across 7 consecutive days

### DDI ranges

Do you require a new DDI range 1 <sup>(36)</sup>	Qty <input type="text"/>	Area code <sup>(37)</sup> <input type="text"/>	Consecutive range <sup>(38)</sup> <input type="text"/>
Do you require a new DDI range 2 <sup>(36)</sup>	Qty <input type="text"/>	Area code <sup>(37)</sup> <input type="text"/>	Consecutive range <sup>(38)</sup> <input type="text"/>
Resilience+ DDI range <sup>(39)</sup>	<input type="text"/>	Resilience+ DDI range <sup>(39)</sup>	<input type="text"/>
Premise <sup>(7)</sup>	<input type="text"/>	End user first name <sup>(8)</sup>	<input type="text"/>
Street/throughfare <sup>(7)</sup>	<input type="text"/>	End user last name <sup>(8)</sup>	<input type="text"/>
Town/locality <sup>(7)</sup>	<input type="text"/>	Job title <sup>(8)</sup>	<input type="text"/>
Country code <sup>(7)</sup>	GB	Telephone <sup>(8)</sup>	<input type="text"/>
Postcode <sup>(7)</sup>	<input type="text"/>	Mobile number <sup>(8)</sup>	<input type="text"/>
		Email <sup>(8)</sup>	<input type="text"/>

Please confirm the business address details via [Royal Mail](#). End user details, where possible please provide a 24 hour contact

If new additional DDI ranges are required please fill in DDI [order form](#).

### Porting DDI ranges

Do you require number porting <sup>(40)</sup>	<input type="checkbox"/>	Please note porting orders can only be accepted after all SIP Trunking testing has been completed and test results submitted.
Please complete 002_SIP Port Number order form		

### CLI set-up

CLI flexibility required <sup>(41)</sup>	<input type="checkbox"/>	As an optional service, O <sub>2</sub> can enable the ability to present NON O <sub>2</sub> registered CLIs as the presentation A-Number CLI.
Incoming CLI rule <sup>(42)</sup>	<input type="text"/>	

# SIP Trunking

## Multi endpoint order form

### Ethernet configurationsite A

Supplier quote reference <sup>(43)</sup>	<input type="text"/>	This field is completed internally in O <sub>2</sub> .	
Service type <sup>(44)</sup>	<input type="text"/>	Resilience Type <sup>(45)</sup>	<input type="text"/>
Bearer <sup>(46)</sup>	<input type="text"/>	Target delivery date <sup>(47)</sup>	<input type="text"/>
Total bandwidth(MB) <sup>(48)</sup>	<input type="text"/>	Internet bandwidth <sup>(49)</sup>	Not required
Voice bandwidth(MB) <sup>(50)</sup>	<input type="text"/>	Public IP addressing <sup>(51)</sup>	Not required
What is the CLI for the service?(FTTC ethernet only) <sup>(52)</sup>	<input type="text" value="n/a"/>		
What type of site is this? <sup>(53)</sup>	<input type="text"/>		
There existing fibre in the building? <sup>(54)</sup>	<input type="text"/>		
Ethernet NTE floor <sup>(55)</sup>	<input type="text"/>		
Ethernet NTE room <sup>(56)</sup>	<input type="text"/>		
Ethernet NTE rack location - number / position <sup>(57)</sup>	<input type="text"/>		
Is O <sub>2</sub> providing the cross-connect cabling? <sup>(58)</sup>	<input type="text"/>		
How is the ethernet NTE to be installed? <sup>(59)</sup>	<input type="text"/>		
Power supply required? <sup>(60)</sup>	<input type="text"/>		
Is the termination area / comms room ready? <sup>(61)</sup>	<input type="text"/>		
If no, when the termination area be ready? <sup>(62)</sup>	<input type="text"/>		
Is there at least 4 x 13 amp power sockets within 1 metre? <sup>(63)</sup>	<input type="text"/>		
Has landlord consent been granted? <sup>(64)</sup>	<input type="text"/>		
If required, when will the landlord's consent be granted? <sup>(65)</sup>	<input type="text"/>		
Landlord name and contact details(phone and email) <sup>(66)</sup>	<input type="text"/>		
Hazard notes and special access requirements <sup>(67)</sup>	<input type="text"/>		
General notes -other information that may be useful <sup>(68)</sup>	<input type="text"/>		
Is the ethernet being installed in a data centre <sup>(69)</sup>	<input type="text"/>		
If Yes to above, please confirm locations <sup>(70)</sup>	<input type="text"/>		

# SIP Trunking

## Multi endpoint order form

### Router details site A

How is the Router to be installed? <sup>(71)</sup>	<input type="text"/>
Router location floor <sup>(72)</sup>	<input type="text"/>
Router location room <sup>(73)</sup>	<input type="text"/>
Router rack number and position <sup>(74)</sup>	<input type="text"/>
If the customer is supplying own router, please enter details make and model. <sup>(75)</sup>	Not applicable
If wires only, are you comfortable to use BGP <sup>(76)</sup>	Not applicable
Is the router to be delivered to the main install site <sup>(77)</sup>	Not applicable
PRIMARY router installation <sup>(78)</sup>	Not applicable
BACKUP router installation <sup>(79)</sup>	Not applicable
Support HSRP (hot standby router protocol) <sup>(80)</sup>	<input type="text"/>

A HSRP configuration is implemented to allow failover between SIP Trunking routers. HSRP allows multiple routers to share a virtual IP and MAC address which is configured as the default gateway to SBC/IP-PBX. Please confirm your internal network between the site locations can supported this configuration.

### Site A site survey

Is the building or site ready for survey? <sup>(81)</sup>	<input type="text"/>
Will the engineer need to complete an induction prior to access being granted to the site? <sup>(82)</sup>	<input type="text"/>
If yes, how long will the induction take (approximately)? <sup>(83)</sup>	<input type="text"/>
Will the onsite contact provide access to all the necessary building and comms areas to allow survey completion? <sup>(84)</sup>	<input type="text"/>
Was the building built before the year 2000? <sup>(85)</sup>	<input type="text"/>
If yes, does the building occupier have an asbestos register which is available to see onsite or prior to survey? <sup>(86)</sup>	<input type="text"/>
Is the building a listed building? <sup>(87)</sup>	<input type="text"/>
Existing BTWE fibre or ONEA reference: <sup>(88)</sup>	<input type="text"/>
Access site notes: <sup>(89)</sup>	<input type="text"/>

# SIP Trunking

## Multi endpoint order form

### Ethernet configuration site B

Supplier quote reference <sup>(43)</sup>	<input type="text"/>	This field is completed internally in O <sub>2</sub> .	
Service type <sup>(44)</sup>	<input type="text"/>	Resilience Type <sup>(45)</sup>	<input type="text"/>
Bearer <sup>(46)</sup>	<input type="text"/>	Target delivery date <sup>(47)</sup>	<input type="text"/>
Total bandwidth(MB) <sup>(48)</sup>	<input type="text"/>	Internet bandwidth <sup>(49)</sup>	Not required
Voice bandwidth(MB) <sup>(50)</sup>	<input type="text"/>	Public IP addressing <sup>(51)</sup>	Not required
What is the CLI for the service?(FTTC ethernet only) <sup>(52)</sup>	<input type="text" value="n/a"/>		
What type of site is this? <sup>(53)</sup>	<input type="text"/>		
There existing fibre in the building? <sup>(54)</sup>	<input type="text"/>		
Ethernet NTE floor <sup>(55)</sup>	<input type="text"/>		
Ethernet NTE room <sup>(56)</sup>	<input type="text"/>		
Ethernet NTE rack location - number / position <sup>(57)</sup>	<input type="text"/>		
Is O <sub>2</sub> providing the cross-connect cabling? <sup>(58)</sup>	<input type="text"/>		
How is the ethernet NTE to be installed? <sup>(59)</sup>	<input type="text"/>		
Power supply required? <sup>(60)</sup>	<input type="text"/>		
Is the termination area / comms room ready? <sup>(61)</sup>	<input type="text"/>		
If no, when the termination area be ready? <sup>(62)</sup>	<input type="text"/>		
Is there at least 4 x 13 amp power sockets within 1 metre? <sup>(63)</sup>	<input type="text"/>		
Has landlord consent been granted? <sup>(64)</sup>	<input type="text"/>		
If required, when will the landlord's consent be granted? <sup>(65)</sup>	<input type="text"/>		
Landlord name and contact details(phone and email) <sup>(66)</sup>	<input type="text"/>		
Hazard notes and special access requirements <sup>(67)</sup>	<input type="text"/>		
General notes -other information that may be useful <sup>(68)</sup>	<input type="text"/>		
Is the ethernet being installed in a data centre <sup>(69)</sup>	<input type="text"/>		
If Yes to above, please confirm locations <sup>(70)</sup>	<input type="text"/>		

# SIP Trunking

## Multi endpoint order form

### Router details site B

How is the Router to be installed? <sup>(71)</sup>	<input type="text"/>
Router location floor <sup>(72)</sup>	<input type="text"/>
Router location room <sup>(73)</sup>	<input type="text"/>
Router rack number and position <sup>(74)</sup>	<input type="text"/>
If the customer is supplying own router, please enter details make and model. <sup>(75)</sup>	Not applicable
If wires only, are you comfortable to use BGP <sup>(76)</sup>	Not applicable
Is the router to be delivered to the main install site <sup>(77)</sup>	Not applicable
PRIMARY router installation <sup>(78)</sup>	Not applicable
BACKUP router installation <sup>(79)</sup>	Not applicable
Support HSRP (hot standby router protocol) <sup>(80)</sup>	<input type="text"/>

A HSRP configuration is implemented to allow failover between SIP Trunking routers. HSRP allows multiple routers to share a virtual IP and MAC address which is configured as the default gateway to SBC/IP-PBX. Please confirm your internal network between the site locations can supported this configuration.

### Site B site survey

Is the building or site ready for survey? <sup>(81)</sup>	<input type="text"/>
Will the engineer need to complete an induction prior to access being granted to the site? <sup>(82)</sup>	<input type="text"/>
If yes, how long will the induction take (approximately)? <sup>(83)</sup>	<input type="text"/>
Will the onsite contact provide access to all the necessary building and comms areas to allow survey completion? <sup>(84)</sup>	<input type="text"/>
Was the building built before the year 2000? <sup>(85)</sup>	<input type="text"/>
If yes, does the building occupier have an asbestos register which is available to see onsite or prior to survey? <sup>(86)</sup>	<input type="text"/>
Is the building a listed building? <sup>(87)</sup>	<input type="text"/>
Existing BTWE fibre or ONEA reference: <sup>(88)</sup>	<input type="text"/>
Access site notes: <sup>(89)</sup>	<input type="text"/>



# SIP Trunking

## Multi endpoint order form

### Ethernet configuration site C

Supplier quote reference <sup>(43)</sup>	<input type="text"/>	This field is completed internally in O <sub>2</sub> .	
Service type <sup>(44)</sup>	<input type="text"/>	Resilience Type <sup>(45)</sup>	<input type="text"/>
Bearer <sup>(46)</sup>	<input type="text"/>	Target delivery date <sup>(47)</sup>	<input type="text"/>
Total bandwidth(MB) <sup>(48)</sup>	<input type="text"/>	Internet bandwidth <sup>(49)</sup>	Not required
Voice bandwidth(MB) <sup>(50)</sup>	<input type="text"/>	Public IP addressing <sup>(51)</sup>	Not required
What is the CLI for the service?(FTTC ethernet only) <sup>(52)</sup>	<input type="text" value="n/a"/>		
What type of site is this? <sup>(53)</sup>	<input type="text"/>		
There existing fibre in the building? <sup>(54)</sup>	<input type="text"/>		
Ethernet NTE floor <sup>(55)</sup>	<input type="text"/>		
Ethernet NTE room <sup>(56)</sup>	<input type="text"/>		
Ethernet NTE rack location - number / position <sup>(57)</sup>	<input type="text"/>		
Is O <sub>2</sub> providing the cross-connect cabling? <sup>(58)</sup>	<input type="text"/>		
How is the ethernet NTE to be installed? <sup>(59)</sup>	<input type="text"/>		
Power supply required? <sup>(60)</sup>	<input type="text"/>		
Is the termination area / comms room ready? <sup>(61)</sup>	<input type="text"/>		
If no, when the termination area be ready? <sup>(62)</sup>	<input type="text"/>		
Is there at least 4 x 13 amp power sockets within 1 metre? <sup>(63)</sup>	<input type="text"/>		
Has landlord consent been granted? <sup>(64)</sup>	<input type="text"/>		
If required, when will the landlord's consent be granted? <sup>(65)</sup>	<input type="text"/>		
Landlord name and contact details(phone and email) <sup>(66)</sup>	<input type="text"/>		
Hazard notes and special access requirements <sup>(67)</sup>	<input type="text"/>		
General notes -other information that may be useful <sup>(68)</sup>	<input type="text"/>		
Is the ethernet being installed in a data centre <sup>(69)</sup>	<input type="text"/>		
If Yes to above, please confirm locations <sup>(70)</sup>	<input type="text"/>		

# SIP Trunking

## Multi endpoint order form

### Router details site C

How is the Router to be installed? <sup>(71)</sup>	<input type="text"/>
Router location floor <sup>(72)</sup>	<input type="text"/>
Router location room <sup>(73)</sup>	<input type="text"/>
Router rack number and position <sup>(74)</sup>	<input type="text"/>
If the customer is supplying own router, please enter details make and model. <sup>(75)</sup>	Not applicable
If wires only, are you comfortable to use BGP <sup>(76)</sup>	Not applicable
Is the router to be delivered to the main install site <sup>(77)</sup>	Not applicable
PRIMARY router installation <sup>(78)</sup>	Not applicable
BACKUP router installation <sup>(79)</sup>	Not applicable
Support HSRP (hot standby router protocol) <sup>(80)</sup>	<input type="text"/>

A HSRP configuration is implemented to allow failover between SIP Trunking routers. HSRP allows multiple routers to share a virtual IP and MAC address which is configured as the default gateway to SBC/IP-PBX. Please confirm your internal network between the site locations can supported this configuration.

### Site C site survey

Is the building or site ready for survey? <sup>(81)</sup>	<input type="text"/>
Will the engineer need to complete an induction prior to access being granted to the site? <sup>(82)</sup>	<input type="text"/>
If yes, how long will the induction take (approximately)? <sup>(83)</sup>	<input type="text"/>
Will the onsite contact provide access to all the necessary building and comms areas to allow survey completion? <sup>(84)</sup>	<input type="text"/>
Was the building built before the year 2000? <sup>(85)</sup>	<input type="text"/>
If yes, does the building occupier have an asbestos register which is available to see onsite or prior to survey? <sup>(86)</sup>	<input type="text"/>
Is the building a listed building? <sup>(87)</sup>	<input type="text"/>
Existing BTWE fibre or ONEA reference: <sup>(88)</sup>	<input type="text"/>
Access site notes: <sup>(89)</sup>	<input type="text"/>

# SIP Trunking

## Multi endpoint order form

### Ethernet configuration site D

Supplier quote reference <sup>(43)</sup>	<input type="text"/>	This field is completed internally in O <sub>2</sub> .	
Service type <sup>(44)</sup>	<input type="text"/>	Resilience Type <sup>(45)</sup>	<input type="text"/>
Bearer <sup>(46)</sup>	<input type="text"/>	Target delivery date <sup>(47)</sup>	<input type="text"/>
Total bandwidth(MB) <sup>(48)</sup>	<input type="text"/>	Internet bandwidth <sup>(49)</sup>	Not required
Voice bandwidth(MB) <sup>(50)</sup>	<input type="text"/>	Public IP addressing <sup>(51)</sup>	Not required
What is the CLI for the service?(FTTC ethernet only) <sup>(52)</sup>	<input type="text" value="n/a"/>		
What type of site is this? <sup>(53)</sup>	<input type="text"/>		
There existing fibre in the building? <sup>(54)</sup>	<input type="text"/>		
Ethernet NTE floor <sup>(55)</sup>	<input type="text"/>		
Ethernet NTE room <sup>(56)</sup>	<input type="text"/>		
Ethernet NTE rack location - number / position <sup>(57)</sup>	<input type="text"/>		
Is O <sub>2</sub> providing the cross-connect cabling? <sup>(58)</sup>	<input type="text"/>		
How is the ethernet NTE to be installed? <sup>(59)</sup>	<input type="text"/>		
Power supply required? <sup>(60)</sup>	<input type="text"/>		
Is the termination area / comms room ready? <sup>(61)</sup>	<input type="text"/>		
If no, when the termination area be ready? <sup>(62)</sup>	<input type="text"/>		
Is there at least 4 x 13 amp power sockets within 1 metre? <sup>(63)</sup>	<input type="text"/>		
Has landlord consent been granted? <sup>(64)</sup>	<input type="text"/>		
If required, when will the landlord's consent be granted? <sup>(65)</sup>	<input type="text"/>		
Landlord name and contact details(phone and email) <sup>(66)</sup>	<input type="text"/>		
Hazard notes and special access requirements <sup>(67)</sup>	<input type="text"/>		
General notes -other information that may be useful <sup>(68)</sup>	<input type="text"/>		
Is the ethernet being installed in a data centre <sup>(69)</sup>	<input type="text"/>		
If Yes to above, please confirm locations <sup>(70)</sup>	<input type="text"/>		

# SIP Trunking

## Multi endpoint order form

### Router details site D

How is the Router to be installed? <sup>(71)</sup>	<input type="text"/>
Router location floor <sup>(72)</sup>	<input type="text"/>
Router location room <sup>(73)</sup>	<input type="text"/>
Router rack number and position <sup>(74)</sup>	<input type="text"/>
If the customer is supplying own router, please enter details make and model. <sup>(75)</sup>	Not applicable
If wires only, are you comfortable to use BGP? <sup>(76)</sup>	Not applicable
Is the router to be delivered to the main install site? <sup>(77)</sup>	Not applicable
PRIMARY router installation <sup>(78)</sup>	Not applicable
BACKUP router installation <sup>(79)</sup>	Not applicable
Support HSRP (hot standby router protocol) <sup>(80)</sup>	<input type="text"/>

A HSRP configuration is implemented to allow failover between SIP Trunking routers. HSRP allows multiple routers to share a virtual IP and MAC address which is configured as the default gateway to SBC/IP-PBX. Please confirm your internal network between the site locations can supported this configuration.

### Site D site survey

Is the building or site ready for survey? <sup>(81)</sup>	<input type="text"/>
Will the engineer need to complete an induction prior to access being granted to the site? <sup>(82)</sup>	<input type="text"/>
If yes, how long will the induction take (approximately)? <sup>(83)</sup>	<input type="text"/>
Will the onsite contact provide access to all the necessary building and comms areas to allow survey completion? <sup>(84)</sup>	<input type="text"/>
Was the building built before the year 2000? <sup>(85)</sup>	<input type="text"/>
If yes, does the building occupier have an asbestos register which is available to see onsite or prior to survey? <sup>(86)</sup>	<input type="text"/>
Is the building a listed building? <sup>(87)</sup>	<input type="text"/>
Existing BTWE fibre or ONEA reference: <sup>(88)</sup>	<input type="text"/>
Access site notes: <sup>(89)</sup>	<input type="text"/>

# SIP Trunking

## Multi endpoint order form

### Managed acceptance testing

The following tests need to be undertaken in commissioning of customer premises equipment (CPE) that is connecting to the O<sub>2</sub> SIP Trunking service. The managed acceptance testing service will include the following tests and test results will be passed to [CFOMT@o2.com](mailto:CFOMT@o2.com). On successful completion of the tests O<sub>2</sub> will complete the service provisioning and the service will be passed into support.

If managed acceptance testing is excluded from the contract, the customer's PBX maintainer will be responsible for the following service acceptance testing and the test results should be passed to [CFOMT@o2.com](mailto:CFOMT@o2.com). Should O<sub>2</sub> not receive a response or sign off to this document after 10 working days from handover to confirm testing has been completed, O<sub>2</sub> will assume that the service is working as per required and live.

- [Test 1 – O<sub>2</sub> SIP Trunkings call – SIP clear](#)
- [Test 2 – SIP call – PSTN clear](#)
- [Test 3 – PSTN call – PSTN clear](#)
- [Test 4 – SIP call – SIP user release without answer](#)
- [Test 5 – SIP call – PSTN user release without answer](#)
- [Test 6 – Invalid number call test](#)
- [Test 7 – Incoming call – PSTN busy](#)
- [Test 8 - Incoming call – SIP user busy](#)
- [Test 9 - address incomplete](#)
- [Test 10 - CLI Presentation test - PSTN > SIP](#)
- [Test 11 - CLIR test PSTN > SIP](#)
- [Test 12 - CLI presentation test - SIP > PSTN](#)
- [Test 13 - CLIR test SIP > PSTN](#)
- [Test 14 - CLI presentation test - PSTN > SIP](#)
- [Test 15 - Fax call to PSTN \(If configured for Fax support\)](#)
- [Test 16 - Call barring – If requested to be set up on the SIP account](#)
- [Test 17 – Call international number \(if no international bar is in place\)](#)
- [Test 18 – Dial 999 shortcode](#)
- [Test 19 – Dial 100 shortcode](#)
- [Test 20 – Dial 101 shortcode](#)
- [Test 21 – Dial 111 shortcode](#)
- [Test 22 – Dial 112 shortcode](#)
- [Test 23 – Dial 195 shortcode](#)
- [Test 24 – Dial 123 shortcode](#)
- [Test 25 – DTMF](#)

Traffic on the following ports must be forwarded through the relevant routers and firewalls on the customer network.

**Signalling:** UDP port 5060 egress / ingress to:

**Media:** All UDP ports between 6000-40000 egress / ingress to:

# SIP Trunking

## Multi endpoint order form

### Managed acceptance testing

The following tests need to be undertaken in commissioning of customer premises equipment (CPE) that is connecting to the O<sub>2</sub> SIP Trunking service. The managed acceptance testing service will include the following tests and test results will be passed to [CFOMT@o2.com](mailto:CFOMT@o2.com). On successful completion of the tests O<sub>2</sub> will complete the service provisioning and the service will be passed into support.

If managed acceptance testing is excluded from the contract, the customer's PBX maintainer will be responsible for the following service acceptance testing and the test results should be passed to [CFOMT@o2.com](mailto:CFOMT@o2.com). Should O<sub>2</sub> not receive a response or sign off to this document after 10 working days from handover to confirm testing has been completed, O<sub>2</sub> will assume that the service is working as per required and live.

## Test 1 – 9: Inbound and outbound calls

### Test 1 – O<sub>2</sub> SIP Trunkings call – SIP clear

Description	
Name:	Successful call – user A calling PSTN user. PSTN user clears
Preconditions:	Valid PSTN / mobile in place, that can be called and verified

### Test 1 steps

Step	Description	Expected result
1	Place a call to the PSTN number using SIP service	Ring tone and answer
2	Answer the call	Speech
3	Wait approx 10 secs	
4	Clear the line on the caller side	PSTN side receives call clear down

# SIP Trunking

## Multi endpoint order form

### Test 2 – SIP call – PSTN clear

Description	
Name:	Successful call – user A calling PSTN user. PSTN user clears
Preconditions:	Valid PSTN / mobile in place, that can be called and verified

### Test 2 steps

Step	Description	Expected result
1	Place a call to the PSTN number using SIP service	Ring tone and answer
2	Answer the call	Speech
3	Wait approx 10 secs	
4	PSTN clears call down	
5	Wait 120 Seconds	
6	Caller receives clear down	Called party

### Test 3 – PSTN call – PSTN clear

Description	
Name:	Successful call – PSTN user calling user A. PSTN user clears
Preconditions:	Valid PSTN / mobile in place, that can place a call

# SIP Trunking

## Multi endpoint order form

### Test 3 steps

Step	Description	Expected result
1	Place a call from the PSTN line calling the SIP assigned geo number	Ring tone and answer
2	User A answers the call	Ringling before answer
3	Wait approx 10 secs	
4	Clear the line on the caller (PSTN) side	Called side receives call clear down

### Test 4 – SIP call – SIP user release without answer

Description	
Name:	Calling party release before answer – calling party is user A1.
Preconditions:	Valid PSTN / mobile in place, that can be called

### Test 4 steps

Step	Description	Expected result
1	Place a call on the SIP line calling the PSTN number	Ring tone
2	Release the call without answer	Ringling stops

### Test 5 – SIP call – PSTN user release without answer

Description	
Name:	Calling party release before answer – calling party is PSTN user
Preconditions:	Valid PSTN / mobile in place, that can place a call



# SIP Trunking

## Multi endpoint order form

### Test 5 steps

Step	Description	Expected result
1	Place a call on the PSTN line calling the SIP assigned O <sub>2</sub> geo number	Ring-back (Ring tone)
2	Release the call without answer	Ringing stops

### Test 6 – Invalid number call test

Description	
Name:	Invalid number – user A calling from O <sub>2</sub> SIP Trunkings
Preconditions:	

### Test 6 steps

Step	Description	Expected result
1	Call the invalid number	Number unobtainable tone or not recognized prompt.

### Test 7 – Incoming call – PSTN busy

Description	
Name:	Incoming call – user busy. PSTN busy
Preconditions:	Valid PSTN / mobile in place, that has no answering machine or call waiting feature installed and a third phone number (user C) which can answer a call

# SIP Trunking

## Multi endpoint order form

### Test 7 steps

Step	Description	Expected result
1	Call the third phone number (user C) from the PSTN line, wait until it gets answered	
2	Place a call on the SIP line calling the PSTN number	Busy tone

### Test 8 - Incoming call – SIP user busy

Description	
Name:	Incoming call – user busy. user A busy
Preconditions:	Valid PSTN / mobile in place, and a third phone number which can answer a call

### Test 8 steps

Step	Description	Expected result
1	Call the third phone number from the SIP line, wait until it gets answered	
2	Place a call on the PSTN line calling the SIP number	Busy tone

### Test 9 - address incomplete

Description	
Name:	address incomplete – user A calling
Preconditions:	

# SIP Trunking

## Multi endpoint order form

### Test 9 steps

Step	Description	Expected result
1	Call the following incomplete number from the SIP line: 654321	Fast busy or service announcement

### Test 10 – 13: CLI presentation

In order to successfully present an 'A number' we expect this to be sent to O<sub>2</sub> in either of the following formats in the FROM header of the SIP INVITE:

10 Digits without leading zero

From: <sip:1625827748@83.245.6.117>;tag=3541226335-339769

E164 Format (+44)

From: <sip:+441625827748@83.245.6.117>;tag=3541226335-339769

The A-number is checked against a database on the O<sub>2</sub> network of geographic numbers that are allocated to the SIP endpoint. If the number presented does not meet the above criteria, the A-Number CLI presented will be a default CLI, which is the first number in the O<sub>2</sub> allocated geographic DDI range.

### Test 10 - CLI Presentation test - PSTN > SIP

Description	
Name:	CLIP – PSTN calling end. Confirm A-end phone rings and number is displayed
Preconditions:	Valid PSTN / mobile in place which has present CLI setting enabled, and CLI capable phone set connected to SIP line

### Test 10 steps

Step	Description	Expected result
1	Place a call on the PSTN line calling the SIP assigned O <sub>2</sub> geo number	Ring-tone and correct CLI

# SIP Trunking

## Multi endpoint order form

### Test 11 - CLIR test PSTN > SIP

Description	
Name:	CLIR – PSTN calling end. Confirm A-end phone rings and number is withheld.
Preconditions:	Valid PSTN / mobile in place which has CLI setting set to withheld, and CLI capable connected to SIP line.

### Test 11 steps

Step	Description	Expected result
1	Place a call on the PSTN line calling the SIP assigned O <sub>2</sub> geo number	Ring-tone and no CLI or withheld shown as CLI

### Test 12 - CLI presentation test - SIP > PSTN

Description	
Name:	CLIP – A-user calling end. Confirm that PSTN phone rings and caller number is displayed
Preconditions:	Valid PSTN / mobile in place which is capable showing CLI , and SIP CPE set to enable CLI sending

### Test 12 steps

Step	Description	Expected result
1	Place a call on the SIP line calling the PSTN number	Ring-tone and correct CLI own with leading zero

# SIP Trunking

## Multi endpoint order form

### Test 13 - CLIR test SIP > PSTN

Description	
Name:	CLIR – A-user calling end. Confirm PSTN phone rings and caller number is withheld.
Preconditions:	Valid PSTN / mobile in place which is capable showing CLI , and SIP CPE set to privacy full (hide CLI)

### Test 13 steps

Step	Description	Expected result
1	Place a call on the SIP line calling the PSTN number	Ring-tone and no CLI or

### Test 14 - 15: Fax

The O<sub>2</sub> SIP Trunking service will support fax and modem transmission subject to the following constraints. Fax and modem transport in band using G.711 a-law codec is supported. Renegotiation to T.38 is supported (subject to interoperability testing). The use of G.729 for in-band faxes is not supported, as its compressed nature may cause tones and messages to be lost.

### Test 14 - CLI presentation test - PSTN > SIP

Description	
Name:	Fax call – from PSTN (G.711)
Preconditions:	Fax equipment connected to PSTN line, second fax machine connected to SIP line, SIP Service CPE set to g.711 fax pass through.

# SIP Trunking

## Multi endpoint order form

### Test 14 steps

Step	Description	Expected result
1	Send a 5 page fax call on the PSTN line calling the SIP assigned O <sub>2</sub> geo number	Ring-tone, training and answer
2	Check fax transmission	Fax machines should train and send all pages with no errors

### Test 15 - Fax call to PSTN (If configured for Fax support)

Description	
Name:	Fax call – from fax user in 'A' domain (G.711)
Preconditions:	Fax equipment connected to PSTN line, second fax machine connected to SIP line, SIP Service and CPE can negotiate the codec to g.711

### Test 15 steps

Step	Description	Expected result
1	Send a 5 page fax call on the PSTN line calling the SIP assigned O <sub>2</sub> geo number	Ring-tone, training and answer
2	Check fax transmission	Fax machines should train and send all pages with no errors.

# SIP Trunking

## Multi endpoint order form

### Test 16 - 17: Call barring

#### Test 16 - Call barring – If requested to be set up on the SIP account

Description	
Name:	Call barring – confirm that prohibited numbers are blocked.
Preconditions:	Provisioning of call barring SIP service should be requested and completed.

#### Test 16 steps

Step	Description	Expected result
1	Call a number which is barred from the SIP line (premium, mobile, international)	Fast busy signal or barred prompt

#### Test 17 – Call international number (if no international bar is in place)

Description	
Name:	Call barring – confirm international numbers can be dialled
Preconditions:	International call barring = No

#### Test 17 steps

Step	Description	Expected result
1	Call the following number from O <sub>2</sub> SIP Trunkings (Paris, France): 0033170758109	Ring-tone, will be unanswered

# SIP Trunking

## Multi endpoint order form

### Test 18 - 24: Shortcode dialling

As part of the provisioning process the endpoint is automatically configured to a range of short codes for emergency services and directory enquiries.

#### Test 18 – Dial 999 shortcode

Description	
Name:	Dial 999 shortcode
Preconditions:	Confirm that a valid End user 999 address is provisioned against the calling party number (All 999 calls without EU address details are reported to OFCOM)

#### Test 18 steps

Step	Description	Expected result
1	Place a call to 999 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

#### Test 19 – Dial 100 shortcode

Description	
Name:	Dial 100 shortcode
Preconditions:	Call 100 from the SIP line



# SIP Trunking

## Multi endpoint order form

### Test 19 steps

Step	Description	Expected result
1	Place a call to 100 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

### Test 20 – Dial 101 shortcode

Description	
Name:	Dial 101 shortcode
Preconditions:	Call 101 from the SIP line

### Test 20 steps

Step	Description	Expected result
1	Place a call to 101 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

### Test 21 – Dial 111 shortcode

Description	
Name:	Dial 111 shortcode
Preconditions:	Call 111 from the SIP line

# SIP Trunking

## Multi endpoint order form

### Test 21 steps

Step	Description	Expected result
1	Place a call to 111 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

### Test 22 – Dial 112 shortcode

Description	
Name:	Dial 112 shortcode
Preconditions:	Call 112 from the SIP line

### Test 22 steps

Step	Description	Expected result
1	Place a call to 112 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

### Test 23 – Dial 195 shortcode

Description	
Name:	Dial195 shortcode
Preconditions:	Call 195 from the SIP line

# SIP Trunking

## Multi endpoint order form

### Test 23 steps

Step	Description	Expected result
1	Place a call to 195 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

### Test 24 – Dial 123 shortcode

Description	
Name:	Dial 123 shortcode
Preconditions:	Call 123 from the SIP line

### Test 24 steps

Step	Description	Expected result
1	Place a call to 123 via SIP line	Ring-tone
2	B party answers call	Speech
3	Confirm to B party that test call is being made and terminate call	Clear down (BYE message on SIP)

# SIP Trunking

## Multi endpoint order form

### Test 25: DTMF

The following methods will be supported to transport DTMF tones:

The core network will support the generation of 'In-band' or 'RFC2833' DTMF transport based on end to end negotiation.

- RFC2833 is the preferred method for the transport of DTMF tones. Support of RFC 2833 is dependent on successful codec negotiation and requires the payload type 101 to be assigned. RFC2833 will be used with both G.711.and G.729 codecs.
- In band over G.711 codec only. If a G729 codec is being used then DTMF tones should not be sent in-band, O<sub>2</sub>will not guarantee the delivery of in-band DTMF over a G729 codec.

#### Test 25 – DTMF

Description	
Name:	Test DTMF
Preconditions:	Call 08081788000

#### Test 25 steps

Step	Description	Expected result
1	Place a call to 08081788000 via SIP line	Ring-tone
2	Connect to IVR	Speech
3	Press 1 to navigate menu	Tone recognised, forwarded to next stage of IVR

# SIP Trunking

## Multi endpoint order form

### SIP header configuration

#### Request-URI Header

The number within the request-URI is used for routing calls and should contain the called number. The format of this number can either be UK national format (with leading zero), UK international format (with two leading zeros and a country code), or full e.164 format (with leading +).

#### Examples

Option	Format	SIP header
1	E.164	INVITE sip:+441618777148@100.100.100.29 SIP/2.0
2	International format	INVITE sip:00441618777148@100.100.100.29 SIP/2.0
3	UK format	INVITE sip:01618777148@100.100.100.29 SIP/2.0

#### TO header

Header must contain SIP Trunking SIP gateway address and the called number. The format of this number can either be UK national format (with leading zero), UK international format (with two leading zeros and a country code), or full e.164 format (with leading +).

#### Examples

Option	Format	SIP header
1	E.164	To: <sip:+441618777148@100.100.100.29>
2	International format	To: <sip:00441618777148@100.100.100.29>
3	UK format	To: <sip:01618777148@100.100.100.29>

# SIP Trunking

## Multi endpoint order form

### FROM Header

The user part of the SIP URI within the 'From' header must contain the calling line identity of the originating device. This identity must be a number registered to the endpoint. The format of this number can either be national significant (with or without a leading zero), or in full e.164 format. The domain part of the SIP URI within the 'From' header can contain either the IP address of the public facing interface or a customer-defined FQDN. O<sub>2</sub> will not use this FQDN for any purpose

### Examples

Option	Format	SIP header
1	E.164	From: <sip:+441618777148@100.100.100.29> or using FQDN From: <sip:+441618777148@your.domain.local>
2	International format	From: <sip:01618777148@100.100.100.29> or using FQDN From: <sip:01618777148@your.domain.local>
3	UK format	From: <sip:1618777148@100.100.100.29> or using FQDN From: <sip:1618777148@your.domain.local>

### PAID Header

The format of the PAID number can either be national significant (with or without a leading zero), or in full e.164 format. If no PAID header is provided, O<sub>2</sub> will insert a PAID header with the default network CLI.

### Examples

Option	Format	SIP header
1	E.164	P-Asserted-Identity: <sip:+441618777148@100.100.100.29>
2	International format	P-Asserted-Identity: <sip:01618777148@100.100.100.29>
3	UK format	P-Asserted-Identity: <sip:1618777148@100.100.100.29>