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## **CLIENT HANDBOOK**

The Magrathea Client Handbook is provided to customers and potential customers of Magrathea Telecommunications for information purposes and does not form part of the contractual documentation governing the relationship between Magrathea Telecommunications and its customers.

The Magrathea Client Handbook outlines current services and information, if you have saved a local copy of this document; please check our website for the most up to date copy.

For new customers looking to set up an account with Magrathea Telecommunications, please see the 'Information for New Clients' section, which details our setting up procedure for new accounts.

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Call origination			
Place your clients' outbound calls over our high quality			
	routes, using SIP or IAX		
Service	Description	Pricing and terms	
A wholesale account to make outgoing calls.	Your outbound account with us will be operated on a prepaid basis. It is your responsibility to ensure that there is sufficient credit on the account to cover the cost of your calls. We will give you online access to check the balance of your account and to view the last few calls made.	There is no set up fee for this service. Payment for call credit should be made to us by bank transfer (Minimum £250 exclusive of VAT). Please see contracts section for the relevant contract and schedule on page 22.	
Choose one of our high quality tariffs including restricted dialling options	While you are testing our service you will be using our trial rates. The trial rate plan uses the same mix of high quality carriers as the Standard rate plan. Alternatively our Gold rate plan uses the best possible carrier available on all routes, giving exceptional reliability and quality. (You can request two accounts so you can route some traffic to each.)  We also offer restricted tariff plans, there are two options to limit the destinations you can dial by the pence per minute on both the standard and gold route plans. Option A: A base set of UK business destinations and international routes priced at 3p per minute and under.  Option B: A base set of UK business destinations and international routes priced at 15p per minute and under.	Our Standard and Gold rate plan are billed in 1 second increments, calls are charged to the nearest 1/10th of a penny and are subject to a 1p minimum call charge. All calls are rounded up. Peak time is 8am to 6pm Monday to Friday UK local time. Off peak all other times. Once you have made your first payment of £250.00 (exclusive of VAT) and returned two copies of the contract and relevant appendices, you can choose to use either our Standard rate plan or our Gold rate plan.  Our Standard ratesheet is available to download from here: <a href="http://www.magrathea-telecom.co.uk/clientinfo">http://www.magrathea-telecom.co.uk/clientinfo</a> Please request a copy of our Gold ratesheet from <a href="magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> and we will email this to you.	
Optional reserve accounts	You can request that an additional holding account is set up, this will be set up to hold funds only – no registration or authentication details will be associated to this account so it cannot be used to make calls.	There is no charge for this service. You can make transfers of a minimum of £100 each time to the main account via the Client Portal (or API).	

You can then use this account to

	hold your funds so that they can be fed onto your main account as required.	
Upgrade your account to make calls to the Emergency Services	We can offer your users the ability to make 999/112 emergency calls from their VoIP devices. As a telephony provider you are likely to be obliged as part of the General Conditions in either the UK or Ireland to give your users the ability to call 999/112. If you would like to upgrade your account for access to the Emergency Services we will require an initial test period where we test your data submissions via our NTSAPI, your 24-hour contact number and the way you pass your emergency calls to our network.  For UK location data, we also offer an easy to use address submission app via our MAGIC portal (coming soon for Irish submissions)	Pricing Schedule can be viewed here https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Annex-Schedule-5-Emergency-Services-v4.0.pdf  Please see the contracts section for relevant contracts on page 22.  For access to our MAGIC portal please contact support@magrathea-telecom.co.uk
Enable your account to pass Caller Line Identity	UK Networking standards do not allow calls to be sent without caller ID. To avoid the risk of calls failing as a result, caller ID should be always sent, but withheld with the appropriate privacy indications if required.  The caller ID must be a valid, dialable number and must uniquely identify the caller. It must not be a number that connects to a premium rate service, or to a revenue sharing number that generates an excessive or unexpected call charge.  We strongly recommend that you read our 'Guidance on network & presentation numbers' document which includes some key points for CLI. This is available to download here <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2019/02/Guidance-on-Network-and-Presentation-numbers-1.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2019/02/Guidance-on-Network-and-Presentation-numbers-1.pdf</a>	To enable your account to pass CLI please email <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> and we will send an agreement to you via docusign.

## Two Tier Managed Billing

We can also offer an optional basic hosted billing service. This is useful if you do not want to get involved in billing systems yourself. The usual way this is utilised is as follows:

User registers to your IP server. You, via an interface, register the users account on our database. You can then add funds to the individual accounts to allow them make calls to the PSTN, the cost of which will automatically be deducted from the users account balance using a tariff set by you. Simultaneously your wholesale account is debited for the call at our wholesale rate.

£500 set up fee and £250 per month management fee.

# Call Termination We offer a complete range of UK and Irish numbers with many different options for terminating the call at your side

side.		
Geographic Numbers - UK and Ireland	Complete countrywide coverage for the UK and Ireland	Standard Numbering Package: Geographic numbers are charged at 50p per number per month with a minimum commitment of £100 per month.
		Low Start Numbering Package: Up to 100 geographic numbers available for £180 per quarter.
		Geographic numbers on both packages will have 10 channels by default, more can be arranged - please email sales@magrathea-telecom.co.uk with a traffic forecast if you would like a price for additional channels.
		Full geographic portability is available on both of these packages.
		You will need access to the MAGIC portal, please email <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> team for log in details.
Non Geographic UK wide numbers (03)	These numbers allow organisations to have a single national point of contact where callers pay no more than the rate that they would to call an 01/02 number.	There is no charge for these numbers for clients on the Standard Numbering Package - there is no out-payment available.
NGCS Numbers (084/087)	Number translation numbers mainly used to provide business contact numbers.	There is no charge for these numbers – out-payments that are available can be viewed here: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Annex-2-UK-NGN.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Annex-2-UK-NGN.pdf</a>

NGCS - Freephone Numbers (080)	Business contact numbers free to the caller where the service provider receiving the call pays the charge.	There is no charge for allocating these numbers - the cost of the incoming calls received are deducted from your prepaid account balance with the rate depending on whether they originate from a mobile network or a landline network, please see the pricing here: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Annex-2-UK-NGN.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Annex-2-UK-NGN.pdf</a>
NGCS - Premium Rate Numbers (09)	Premium Rate Numbers are available for services where the caller pays for the content delivered on their own telephone bill. In compliance to the PSA Code of Practice, these numbers require registration. You will also need to check if the service you intend to operate requires prior permission and provide us with any supporting documentation before they can be allocated to you.	There will be a £100.00 minimum set up fee for the first Premium Rate Number. Any additional technical requirements will be extra. Revenue earned on these numbers will be calculated at the end of each month and paid to you 45 days later in accordance with our terms and conditions.
Personal Numbers (070)	Numbers to be used as 'follow me' contact numbers for example, a single number for travelling users. Please familiarise yourself with Ofcom's Guidance on the Acceptable Use of 070 and be aware that these numbers require registration.	There is no charge for these numbers – out payments can be viewed here:  https://www.magrathea- telecom.co.uk/wp- content/uploads/2018/11/Annex-2-UK- NGN.pdf.  You must not share any revenue or out payments obtained with your End User.
LIECS (VoIP) numbers (05)	Designated by Ofcom for use with 'New Voice Services' as subscriber numbers.	There is no charge for these numbers.

Gold Numbers	Gold numbers are available for all the above number types. Memorable numbers, ending 0000 or attractive repeating digit patterns like 808080 for example, will enable your customer to maximise their sales opportunities and will provide an excellent return on investment when used in advertising.	Please email sales@magrathea-telecom.co.uk to request a quote for gold numbers. One off allocation fee for these numbers start from £100 upwards. Once a number has been allocated to you it is only subject to the standard monthly cost (where applicable.)
Number Portability	We offer a number porting service between Magrathea and most other major networks. Our knowledgeable and efficient porting team have many years of experience of working closely with the other networks to migrate numbers into our numbering service with minimal disruption. We have an easy to navigate online portal for the submission and tracking of porting requests. Our Porting guide can be found here:  https://www.magratheatelecom.co.uk/wp-content/uploads/Porting-guide-v7.3.pdf	£10 per number to be ported, capped at £50 for a multi-line port. Leadtime 4-21 working days depending on the installation type to be ported. Portability is available to customers on our Standard Numbering Package - once ported in, numbers will be charged at 50p per number per month.  In order to port numbers you will need access to our MAGIC portal; please support@magrathea-telecom.co.uk to set this up.

Provision and manage your inbound numbers		
Basic Number Translation or Chargeable Number		
Translation		
Basic Number Translation	Via our NTSAPI, basic level access is free of charge and gives you access to provision and manage your numbers with the options to deliver them to SIP, IAX, Voicemail to Email and Fax to Email.	Aside from any per number charges due, there is no charge for this type of account.
Chargeable Number Translation	If you wish to point your numbers to PSTN destinations, for example if you want to forward a geographic number obtained from us to a mobile, you can choose to upgrade to a Chargeable Translation account. Then as well as all the non-chargeable destinations available with a basic NTSAPI account, you can also choose to point your numbers to PSTN destinations, with the associated cost of forwarding these calls being deducted in realtime from a prepaid account balance.	There is a one off set up charge of £250 plus VAT if you require this type of account.
CLI on incoming calls – Network Mode:	The default setting on incoming number delivery is that where the CLI is withheld, this will be delivered to you with the number withheld and so you will not see where the call originated in the call signalling.  However we can offer the option for you to have the call passed to you in Network Mode. With this enabled, the CLI information that you receive in the signalling from Magrathea may contain additional numbering information like a withheld number (and the relevant privacy settings) which must not be passed to any enduser or end-user terminating equipment. For more information please see <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/10/Network-Mode-CLI.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/10/Network-Mode-CLI.pdf</a>	There is no additional charge to use this service. Please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> to have this enabled on your numbering. We will arrange for a copy of the agreement to be sent via docusign.

## Other options to help you manage your inbound number termination services.

#### **SIP Resilience**

Magrathea's SIP Resilience product allows you to nominate a number of IP addresses for our servers to send calls to, giving greater resilience and load balancing options. Our servers will take one IP address from the pool on a round robin basis and send the call to that server. Alternatively, you may opt to set a priority ranking on your IP addresses, in which case they will be selected in order. Our SmartDNS system will probe each IP address several times a minute and the moment that a failure is detected it will be removed from the pool until it starts responding again. This will make sure that Invites are only sent to servers that are responding.

There is no charge to use this service. If you would like more information on this product or to set it up, please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a>

## Emergency PSTN Fallback

If you require emergency fallback to a PSTN number on just one or two inbound numbers we can offer this – this is designed to be used as a PSTN failover in case of occasional emergencies.

We would not expect it to be used for large volumes of calls - if you wish to set PSTN targets for more of your geographic numbers and to control these destinations through the API, you will need to upgrade to a Chargeable Translation Account.

There is no charge to use this service, the cost of the forwarded calls will be deducted from your prepaid account balance at the end of the month. If you would like to set this service up or to make target changes to numbers using the PSTN Fallback service, please email <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> during business hours.

## Number Hosting

If you have obtained your own Ofcom number allocations, you can avoid the expense and administration required to operate your own BT interconnect by instead leasing an interconnect partition from Magrathea. We manage all the complex processes involved with managing interconnect capacity, network routing, number builds, etc., allowing you to concentrate on building your business.

We have two number hosting packages. You will need to forecast your useage and then chose the most appropriate package from our price list here: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Annex-Schedule-7-Hosted-Numbering-Price-List-v4.0.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Annex-Schedule-7-Hosted-Numbering-Price-List-v4.0.pdf</a>

Every month you will receive a detailed report showing the revenue generated by your numbers. Because of our network's diverse points of interconnect the revenue generated from NTS numbering will be higher than the revenue generated on less well-connected networks.

General informa	tion to help you manage your account
Client resources and documentation	All of our client information documents, ratesheets etc are available to view and download here: <a href="http://www.magrathea-telecom.co.uk/clientinfo">http://www.magrathea-telecom.co.uk/clientinfo</a>
Privacy Policy and Data Protection	We are committed to protecting your information, being transparent about what data we hold and how we use it. Our Privacy Policy can be viewed here: <a href="https://www.magrathea-telecom.co.uk/privacy-policy/">https://www.magrathea-telecom.co.uk/privacy-policy/</a>
	Our Data Protection Agreement can be viewed here: https://www.magrathea-telecom.co.uk/wp- content/uploads/2018/09/Annex-Schedule-7-Hosted- Numbering-Price-List-v4.0.pdf
	If you have any questions about Data Protection that are not dealt with by these documents, please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a>
How to make payments to us	All payments must be made by bank transfer (Minimum £250 exclusive of VAT). Transfers that are below our minimum level will be subject to a handling fee of 5% or £5, whichever is higher. All payments to our bank account should be referenced with your wholesale account number to help us identify it. It will also expedite the transaction if you send an email to accounts@magrathea-telecom.co.uk confirming details of the payment. We will only credit your account with the funds that actually arrive in our bank, so please make sure that when transferring funds you elect to pay the transfer charges.  Address: HSBC  6 Northbrook Street  Newbury,  Berkshire  RG14 1DT  ENGLAND  Account Name: Magrathea Telecommunications Ltd  Account No.: 01387510 Sort Code: 40-44-52  For International payments:  SWIFT BIC: HBUKGB4B  BIC11: HBUKGB4166C
	IBAN: GB10HBUK40445201387510  In the event that you have no option other than to send a cheque, please note that cheques drawn on a UK bank are subject to ten working days clearing, foreign cheques are not accepted and will be returned. There will be a 1% administration charge deducted from any non-electronic payments (i.e. cash or cheque).

## Client Portal: To check your balance and make simple changes to your account.

It is your responsibility to check you have sufficient funds on your account at all times. The Client Portal will help you manage your account with Magrathea by showing you your account balance, the details that we hold for you and will also allow you to access information on our services and make simple changes to your account – including transferring funds between your accounts.

We can also offer access to our RESTAPI which, in addition to all of the functionality currently offered by our existing NTSAPI, will allow you to create custom interfaces for the Client Portal features.

There are different levels of access to these tools which means you can grant different levels of access to different people, depending on their role in your organisation.

If you would like to have access to the RESTAPI and/or Client Portal, please sign and send back a copy of the Portal Access Agreement which can be downloaded from here:

https://www.magrathea-telecom.co.uk/wp-content/uploads/Client-Portal-Access-Agreement-4.pdf

We will require one of these per username and once we have received these, access can be set up very quickly.

## How to raise an outbound fault

If you have found a fault on calls being placed outbound over the Magrathea network, there are certain things we will need to enable us to investigate and, if necessary, raise the fault with our interconnect partners.

#### A description of the issue

An accurate description of the issue you would like to report is essential. This is especially the case with audio faults, where we will need to know which direction is affected and, in the case of noise or interference faults, what is heard by whom. It's also useful to know when the problem started.

#### Can the issue be duplicated?

If you are experiencing an issue dialling a number: -

- Can it be dialled from a different CLI?
- If so, is it possible that the called party has blocked the original CLI for some reason? CLIs can also be blocked at a networks level.
- For calls to an overseas number, is your CLI a local/national number for the country you are dialling? Many countries will not allow internationally originated calls to present a CLI that appears to be local/national.
- Ensure that international CLI is presented in the correct format, please see our LI Agreement for details.

If you are experiencing an audio issue:-

- Is the issue present on all calls, or is intermittent?
- Do you have examples where the audio issue is not present? This is useful for comparison purposes.
- Is the issue present if the number is called from a different CLI or from a mobile?

For audio issues, we will need to a full SIP trace with RTP media for analysis.

#### Call examples

Call examples are very important for a variety of reasons – they help us identify any common denominators or patterns in call routing and/or carrier, any errors in CLI or number format and gives us information on where and why a call may have failed.

Our standard requirement is at least three examples from the last 24hrs, which is also a requirement of our interconnect partners, and a fault may not be accepted if the call examples are older. If you can provide more than three examples, they would be very welcome!

We may need to do some testing ourselves, we will ask for permission to do this. If we are unable to duplicate the issue you have reported, we may ask for more information on the numbers being dialled or the nature of the calls being placed.

#### Raising the fault with our interconnect partners

Once the fault has been proved and we have all the information we need, we will raise the fault with the relevant interconnect partner. They in turn will open a ticket and investigate.

Sometimes, if the fault in not specifically with their network, they may have to raise a fault with an up-stream provider. This may mean that we will need to wait for responses, which can cause delays. We may also be asked for more call examples and/or traces.

We will do everything we can to get a timely resolution and keep you updated during the investigation process.

## A note on VAT for UK based clients

With effect from 1st February 2016, Wholesale VoIP termination is subject to the VAT reverse charge mechanism. Your payments are now treated as NET of VAT and the amount of VAT due to HMRC on your payment to us is to be declared by you to HMRC. You can find more information about the legislation and what this means for you at this link:

https://www.gov.uk/government/publications/revenue-and-customs-brief-1-2016-vat-domestic-reverse-charge-for-businesses-wholesaling-telecommunications-services/revenue-and-customs-brief-1-2016-vat-domestic-reverse-charge-for-businesses-wholesaling-telecommunications-services

Invoicing for non-minutes based services from us will not be affected, for example geographic numbering, colocation, hosting services. These invoices and the way that VAT is accounted will not change for these services.

## Customers based outside of the EU

Companies based outside the EU will be required to provide additional identity documentation to open an account, so please send either a copy of your Company Registration Document or Tax Registration Document back to us with your customer contact form when you initially set up your account.

## Emergencies and out of hours support

Please refer to our Service Level Agreement for full details of our support procedures and contact information: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2019/02/Service-Level-Agreement.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2019/02/Service-Level-Agreement.pdf</a>

**Category A/Critical faults** (e.g. all inbound numbers cease to work or termination to all destinations has ceased) may be reported to 07803 136 339 24 hours a day, 7 days a week.

Category B faults (e.g. customers are unable to interface with Magrathea's network or a batch of inbound numbers are failing) should be reported to 0345 004 0040. All out of hours faults reported by telephone should be followed up with an email to support@magrathea-telecom.co.uk.

Category C faults and general support queries (e.g. poor call quality to a single destination, CDRs unavailable etc) are to be reported by email only to support@magratheatelecom.co.uk. This address is read seven days a week and we aim to respond to all non-urgent queries within 24 hours.

#### Service updates

In the event we need to send a service update, these will be emailed to our mailing list and shown on our website. Please keep us updated as to the best email address to send these updates to. To check our website for recent faults or service interruptions please go to <a href="https://www.magrathea-telecom.co.uk">www.magrathea-telecom.co.uk</a>

Alternatively, our off-site information page is http://www.magratheastatus.com

## Using the NTSAPI and RESTAPI for numbering: Access and tips

Please refer to the Numbering API User Guide for details on how to activate and manage numbers via our NTSAPI. <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Numbering-API-Instructions-2.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Numbering-API-Instructions-2.pdf</a>

All of the all of the functionality currently offered by our existing NTSAPI is now available via our RESTAPI. If you would like to have access to the RESTAPI please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a>.

To reassure our clients who have fully integrated our original NTSAPI into their systems and processes, we currently have no plans to retire this tool and will continue to support its features. However, we are unlikely to add any new features or commands with any future features only being incorporated in the new RESTAPI.

## Below are some answers to questions that come up frequently for users of the NTSAPI:

Please remember that all numbers must be ACTIvated and SET following the ALLOcation otherwise they may still be requested by other clients.

All numbers must be used once in the first two weeks to fully activate them, and then at least once every three months to keep them active. However, if you have permission to allocate geographic numbers, all number allocated with your login will be set to never expire, it is therefore your responsibility to manage number allocations and DEACtivate any numbers that are no longer required otherwise you will continue to be charged for numbers that are not needed.

If you wish to have a separate login for geo and non-geo allocations to better manage the expiry dates of numbers, please let us know.

In the event of non-payment for geographic numbers, Magrathea will suspend your allocation for a period of one month, after which time they will be returned to the numbering pool for re-allocation.

If you require a large batch of numbers please email <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> so that they may be pre-allocated for you.

CDRs and reports	We can make encrypted CDR's available to you for download via FTP on a daily basis. Please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> so we can set this up for you. If you have revenue generating inbound numbers you will receive a statement at the end of each month where revenue due exceeds our minimum out payment of £100.
	You will be paid any funds due in accordance with our terms and conditions.

Capacity and forecasting	By default your outbound account will have access to 150
	notional channels. Magrathea are constantly monitoring
	usage and traffic levels, however we do ask that our clients
	provide us with a traffic forecast whenever possible to assist
	us with this process. This is particularly important if you
	expect a sudden or large increase in traffic. If you require
	dedicated capacity for your project please request a quote
	from sales@magrathea-telecom.co.uk.
Firewalls and whitelisting	Traffic for Magrathea services will originate from a number of
IP traffic	IP addresses and you should ensure that your equipment
	will not reject this traffic.
	Please can you ensure that at a minimum you allow
	incoming traffic from us on the following IP addresses:
	SIP:
	87.238.72.129
	87.238.72.130
	87.238.73.129
	87.238.73.130
	87.238.74.129
	87.238.74.130
	213.166.3.129
	213.166.3.130
	IAX:
	87.238.72.140
	87.238.73.140
	87.238.74.140
	213.166.3.140
	In addition, RTP traffic may originate from any of the IP
	addresses contained in the following subnets On any
	port > 1024:
	87.238.72.128/26
	87.238.73.128/26
	87.238.74.128/26
	87.238.77.128/26
	213.166.2.128/26
	213.166.3.128/26
	213.166.4.128/26
	If you firewall UDP traffic on your network you must ensure
	the above subnets are permitted.

Connecting to Magrathea for Wholesale call conveyance via SIP or IAX.	We can support SIP connections by Registration, IP Authentication or by a dual authentication solution which combines both ways, to increase security and also give you more choice as to how to configure your side.
	If your system requires registration, you can register to <username>@sipgw.magrathea.net prior to making calls. However we do not require registration before call attempts are made provided that the username and password are presented in the INVITE.</username>
	For IP authentication for SIP calls, you will need to send traffic to sipipgw.magrathea.net. Please contact <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> with a list of the IP's you would like us to authenticate traffic from.
	For dual authentication, username and password registration can have an IP mask applied to it, so that our servers recognise which account you are using but only allowing traffic using that username if the IP address is one that has been pre-registered.
	As well as offering an additional layer of security, it will also mean that you can use the same IP for authentication on two different accounts which we could not previously offer – for example when using a standard account and a gold account simultaneously.
	If you are using IAX, you will need the username and password you were issued with. The host is iaxgw.magrathea.net.
	In all cases, you should make your connection to us directly from your equipment, we do not advise that you connect your end user's equipment directly to us.
Codecs supported	We support the following codecs for outgoing calls: G.711 a-law; G.711 u-law, iLBC and GSM Full Rate over IAX and G.711 a-law; G.711 u-law; GSM Full Rate; G.729 and G.723.1 over SIP.
DTMF	We support RFC2833 DTMF and inband DTMF.
Interoperability – Moving to a full IP network	Moving away from the legacy TDM infrastructure is an exciting time for the telecoms industry. At Magrathea, we have been working on moving our network to full IP for some time and are happy to share our findings and recommendations from what we have learned. For full details including FAQ, please see: https://www.magrathea-telecom.co.uk/wp-content/uploads/Interoperability-FAQ-and-best-practice-1.pdf
Secure Access	Encrypted connections to some Magrathea services are available to all clients using their existing login details.  Secure Access can be used interchangeably with the current non-encrypted version of the same service to access the NTSAPI, FTP CDR downloads, Account Balance Check and

Porting Portal. For more details please see https://www.magrathea-telecom.co.uk/wp-content/uploads/Magrathea-Secure-Services-Access-Guidev6.0.pdf

## Other services

Our skills don't only lie in voice technology; supporting our services are our skills in developing an international IP network with reliability being key. For additional information on any of these services, please contact sales@magrathea-telecom.co.uk or 0345 004 0040

### **Magrathea Interconnect**

We can offer you a direct interconnect to our network, cutting out the internet. We offer special wholesale rates to all customers who have co-located equipment, have a direct interconnect into us, or use our hosted billing service so an interconnect is ideal for clients who wish to benefit from a closer relationship with us and those who require secure connectivity on dedicated links. We can use various methods to set up an interconnect including BGP for ISP clients and a static link with Magrathea provided IP addressing for customers with no BGP router.

#### Colocation

Colocation is a crucial value-added service that we offer to clients who want to get their equipment as close as possible to our network, in a secure location. Our colocation facility is based in the world-renowned Telehouse East datacentre and are available from 2U to a full 42U rack, depending on your needs. Co-locating with Magrathea also means you have access to our full internet connectivity, with multiple links to a whole variety of providers to ensure the best possible IP routes worldwide. Your customers then benefit from our world class IP network, which we are constantly monitoring.

#### Fibre & Partial Fibre (SOGEA)

Whether you want to update your product portfolio from a legacy product or add something new, we can help you join the expanding fibre broadband marketplace. We are able to remove many of the barriers of entry with our wholesale expertise. By buying directly from Magrathea, you can offer your customers our Fibre to the Premises (FTTP) product and where not available there is Single Order Generic Ethernet Access (SOGEA). We have access to BT Wholesale and AllPoints Fibre products, offering a range of speeds so you can meet the needs of your customers who use it for their leisure, work activities, or both.

To place an order you will need access to our MAGIC portal, please email <a href="mailto:support@magrathea-telecom.co.uk">support@magrathea-telecom.co.uk</a> to obtain access details.

NB Routers/ Customer premises equipment are NOT provided. If taking BT products you can order them directly for an extra cost.

Ethernet	We can provide an Ethernet connection between a client and our network or any other network co-located in Telehouse, London. Our Ethernet connection service enables your customer's UK based LAN and our network in Telehouse to work together as a single Ethernet domain. This simplifies file sharing and enhances your ability to deliver services such as VoIP and video conferencing. Our service uses Ethernet over MPLS technology, which can provide speeds from 10 Mbit/s up to 1 Gbit/s. It gives you carrier class reliability and quality with low latency, packet loss and jitter, which is especially important for IP based voice applications.

Information for new clients		
Testing our services and moving from a trial basis to a full		
account.		
Test our outbound call termination service:	We can set you up with a test account with £2.00 free credit to test our services.  If testing goes well and you would like to use the account for your live traffic, then on receipt of a first payment of £250 and signed contracts we will move you from the trial onto either the standard wholesale tariff or our gold route tariff depending on your preference.	
Test our inbound numbering service:	We can give you a non-geographic number, pointed to your SIP or IAX destination with no charge.  If you would like to perform some extended testing, our Trial Geographic Numbering package may be suitable. With this package you will have access to our NTSAPI where you can provision up to 25 numbers, with 2 channels each, for £100 per year. These numbers are for your own internal use and should not be resold. Porting is not available with this package. If you would like to use our Trial Geographic Numbering Package you will need to sign and return a copy of this Agreement: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Geo-Trial-Package-MF-180615-1.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Geo-Trial-Package-MF-180615-1.pdf</a>	

#### Contracts

## You will be sent contracts to sign via Docusign.

The following are links to the current versions of our contract documentation. If you have signed an earlier version we will issue any updates to the main contact on your account by email and will assume acceptance of changes unless we have your queries within the timescale given on the notification.

**All** clients will need to return the Network Status Declaration, the Telecommunication Services Agreement and the Data Processing Annex:

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Network-Status-Declaration-1.pdf

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Telecommunications-Services-Agreement-v4.0.pdf

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Annex-TSA-Data-Protection-v4.0.pdf

Clients wishing to take call origination (outbound calling) will need to return Schedule 1 and the Line Identity Agreement as follows:

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-1-Wholesale-Call-Conveyance-v4.0.pdf

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/CLI-Agreement.pdf

Clients wishing to take any Non-Geographic call termination (inbound numbering) services will need to return Schedule 2 as follows:

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-2-Inbound-Non-Geographic-Number-Service-v4.0.pdf

Clients wishing to take Geographic call termination (inbound numbering) services will need to return Schedule 2, Schedule 3 and if based in the UK payment is by Direct Debit.

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-2-Inbound-Non-Geographic-Number-Service-v4.0.pdf

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-3-Inbound-Geographic-Number-Service-v4.0.pdf

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/10/Direct-Debit.pdf

Clients wishing to have Network Mode enabled on their inbound call delivery will need to sign and return the Network Mode agreement here: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Network-Mode-CLI.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/11/Network-Mode-CLI.pdf</a>

Clients wishing to pass calls to the Emergency Services will need to return Schedule 5: <a href="https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-5-Wholesale-Access-to-Emergency-Services-v4.0.pdf">https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-5-Wholesale-Access-to-Emergency-Services-v4.0.pdf</a>

Clients wishing to have their own Ofcom number ranges hosted on our network will also need to return Schedule 7 as follows:

https://www.magrathea-telecom.co.uk/wp-content/uploads/2018/09/Schedule-7-Hosted-Numbering-Service-v4.0.pdf

Clients who would like to take Fibre broadband services from us will also need to return Schedule 14:

https://www.magrathea-telecom.co.uk/wp-content/uploads/Schedule-14-Fibre-Broadband-Product.pdf