



Monday 2:41 PM

## 2023 Guide to SMS and MMS

Leverage Telnix's expertise to unlock the potential of messaging with key performance metrics.

~20 min read



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Improve performance

59371



Check out the latest summer drop. 30% off now through Friday. Shop: <https://threads.com/summer-drop-23>

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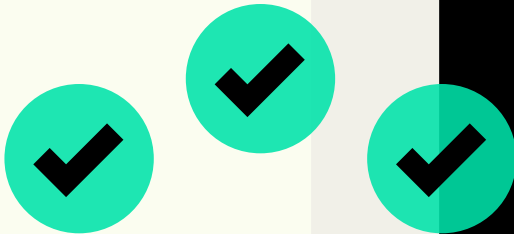
Happy spring! Visit our website to view new arrivals. Text STOP to opt-out of receiving messages from us.

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# Improve performance

A transparent overview of messaging metrics based on 1 billion data points.

**Plenty of articles tout the benefits of SMS and MMS as channels. However, few go into technical detail about performance benchmarks or targets based on statistically significant data. Use the information in our data-based guide to steer your messaging strategy and develop best practices to achieve ideal performance.**

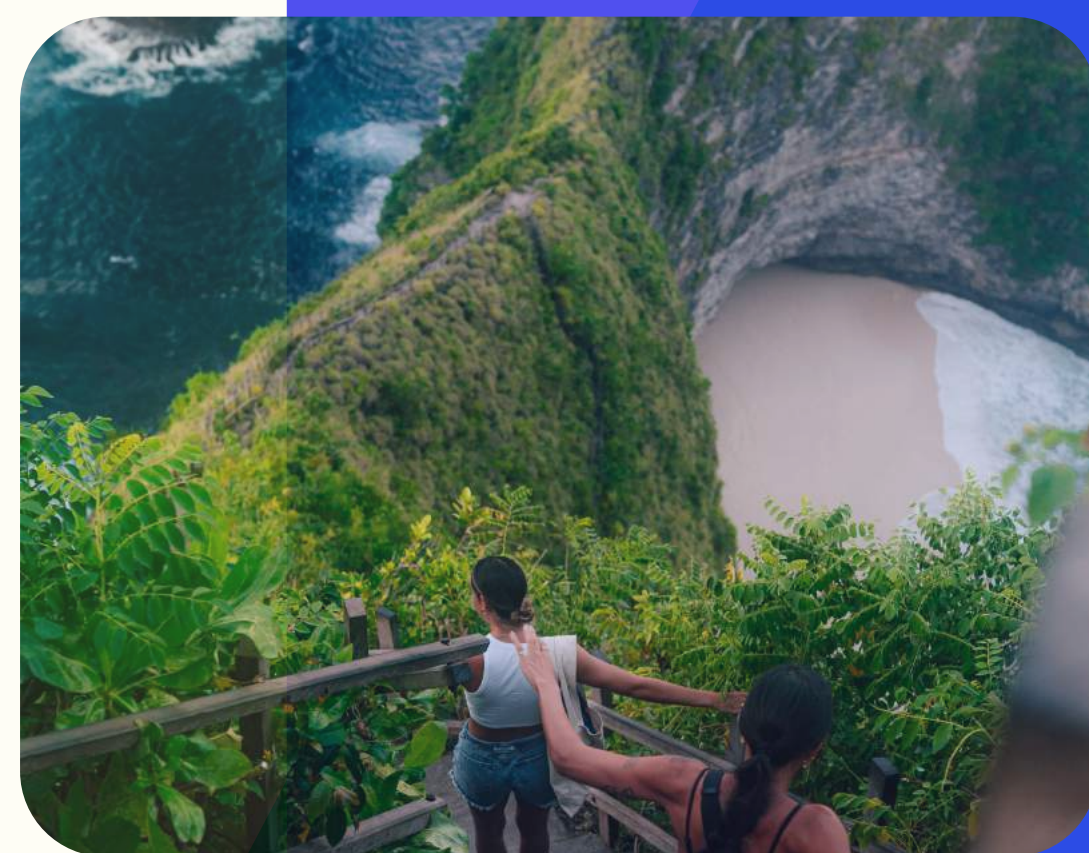
In an increasingly competitive digital world, reliable messaging services are essential for businesses to succeed. However, many businesses don't know what targets to strive for or how to achieve ideal performance for their messaging platform. That's why Telnyx—one of the world's only billion-scale messaging platforms—has created the data-based 2023 guide to SMS/MMS and messaging.

We designed this guide to messaging to help businesses establish their own messaging strategies and benchmarks. With a combination of quantifiable metrics and advice from our experienced team, this report provides an authoritative overview of best practices for leveraging SMS messaging in 2023. Based on a sample of over 1 billion messages sent through the Telnyx Messaging API in late 2022, industry publications, and our expert team's decades of combined messaging experience, this report will help you design the most effective messaging campaigns possible.

# 1B

DATA POINTS INFORMED RESEARCH FOR THIS MESSAGING GUIDE

MMS



Check out these deals on spring getaways including active nature excursions and remote escapes! Explore getaways: <https://tripmentor.com/1fdjfh33>

SMS


Hey Zara, Your trip to Porto is coming up! Check out dining options near your stay. Explore: <https://tripmentor.com/porto-dining-options>




# Messaging is a valuable tool

Make sure you measure up.

With SMS and MMS messaging (texting), it's easy for companies to reach mass audiences with a single message or create personalized, convenient interactions. Nearly everyone has a cell phone, and SMS messages have incredibly high open rates—up to 98%—which blows other direct channels, such as email, out of the water.

**7298432873**  
 Pediatrics Brooklyn: This is a reminder of your upcoming appointment. Please reply "1" to confirm or "9" to cancel.

**59371**  
 Check out the latest summer drop. 30% off now through Friday. Shop: <https://threads.com/summer-drop-23>

**+1 (237) 121-2544**  
 Hi Michael, we appreciate your donation to our campaign. For more info about volunteer opportunities text 1. Text or 2 to opt out. Thanks!

## Telnyx use cases

Telnyx processes billions of messages through our API and receives consistently high ratings for our [performance and usability](#). Customers use us for a variety of use cases—from notifications (like [FreedomPark](#) and [Fetch](#)) to massive outreach campaigns like [Point Blank Political](#) (which saved 73% on their messaging bill after switching to Telnyx).

SMS and MMS messaging support many use cases, from customer service and appointment reminders to marketing campaigns that drive sales. Best of all, it's easy to get started with SMS as it's surprisingly affordable and integrates quickly with other systems.

# 98%

OPEN RATE ON SMS MESSAGES

Although it's relatively straightforward to get started with messaging, it can become complicated when you need to scale your operation. For example, expense and compliance become significant factors when managing [different numbers and types of messaging](#).

This guide will give you the insights you need to create a successful messaging strategy. You'll find advice on target metrics, what to measure, why it matters, and industry standards. We also cover troubleshooting tips for common message delivery issues, so you can quickly get your messaging back on track. With a better understanding of the medium, you can measure up to the competition and make the most of SMS and MMS messaging.

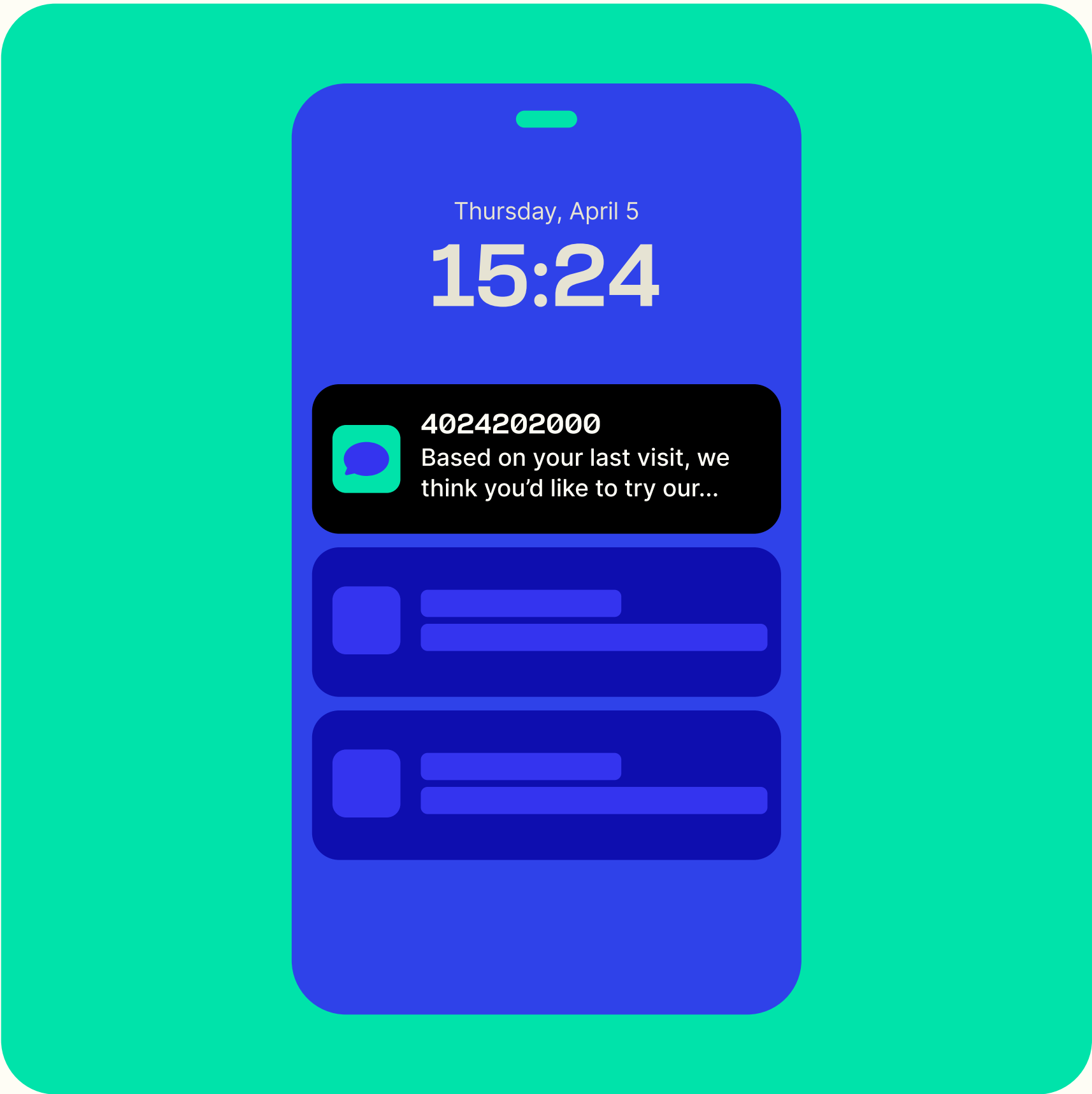
# A glossary of terms

Understand common SMS- and MMS-related terms.

There are a lot of acronyms and jargon floating around the telecommunications world. To help you make sense of the messaging space, we've compiled a quick reference guide to some common terms:

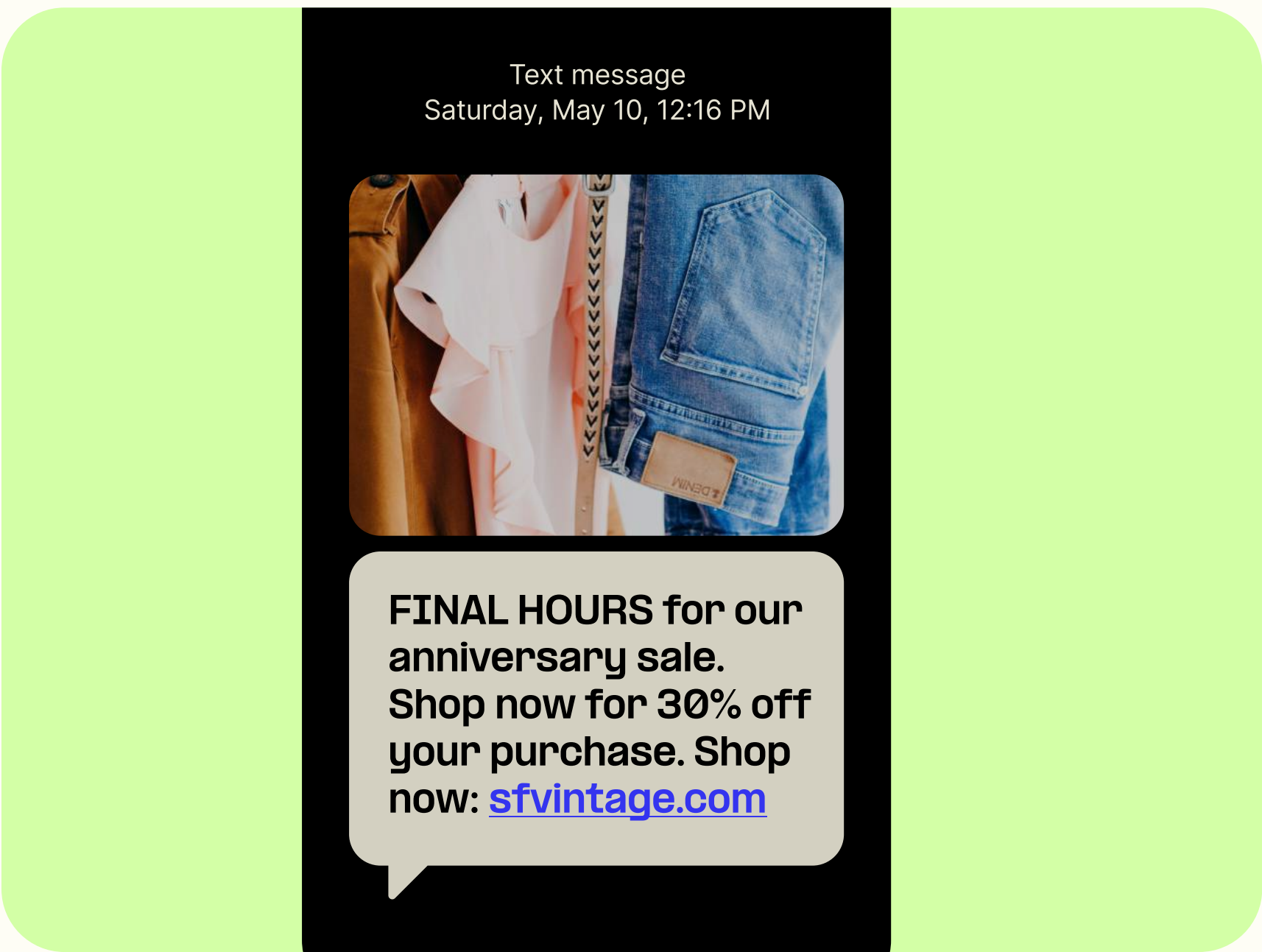
### SMS (Short Message Service)

Text messaging service that enables users to send and receive short messages—up to 160 standard alphanumeric characters in length.



### MMS (Multimedia Messaging Service)

Service that allows users to send and receive messages containing multimedia content such as images, videos, and audio.



### A2P (Application-to-Person)

Type of messaging used by businesses to send automated messages to customers. Various use cases include marketing and outreach, customer support and sales, notifications (e.g., shipping), and reminders such as appointment notices.

### P2P (Person-to-Person)

Type of messaging used when messaging occurs between two individuals. Typically used for personal conversations and does not involve automated processes.



Message part

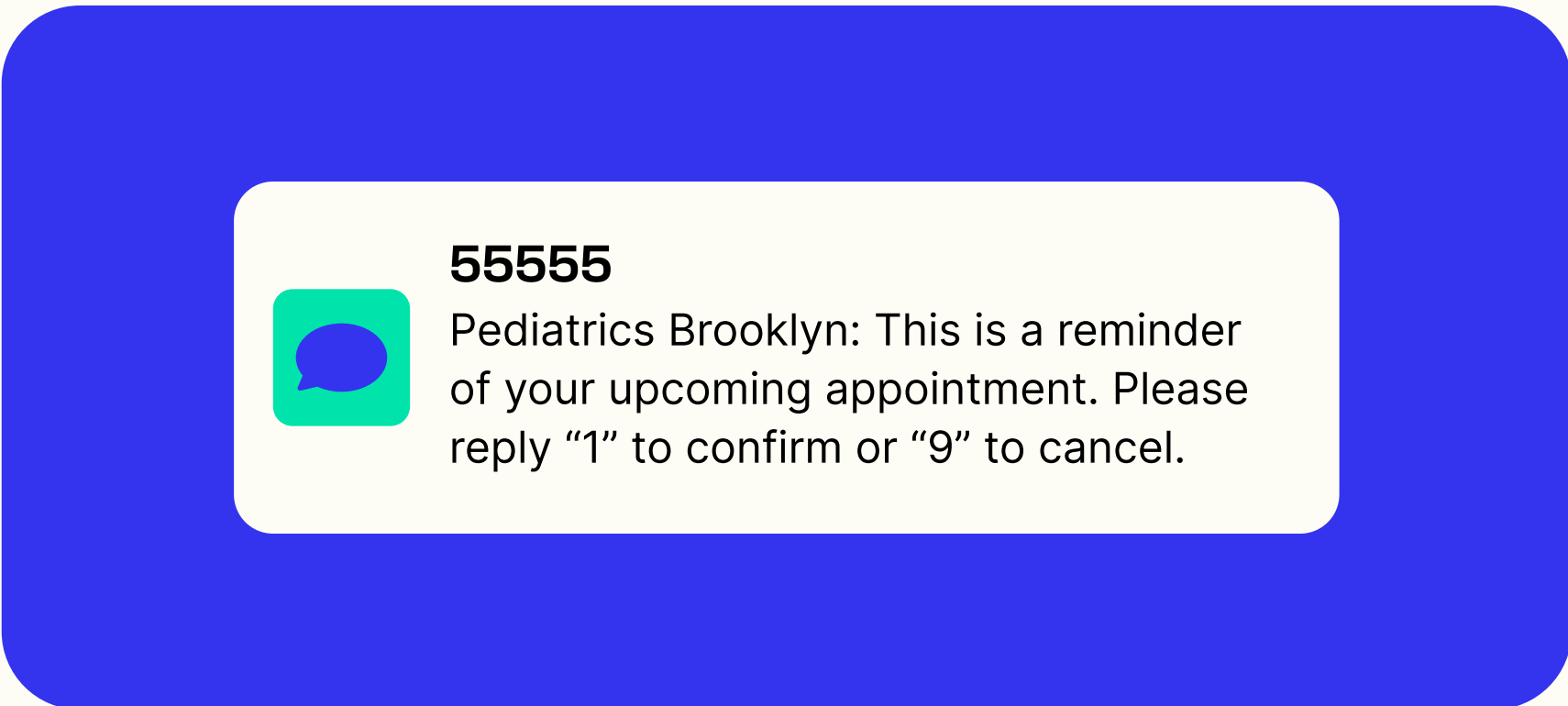
A single message—especially SMS—can be broken into parts depending on the length and character type. Basic alphanumeric character sets are typically a maximum of 160 characters, whereas messages that include Unicode characters (such as emojis) are limited to 70 characters per part.

Long code

10-digit numbers used to send and receive SMS and MMS messages.

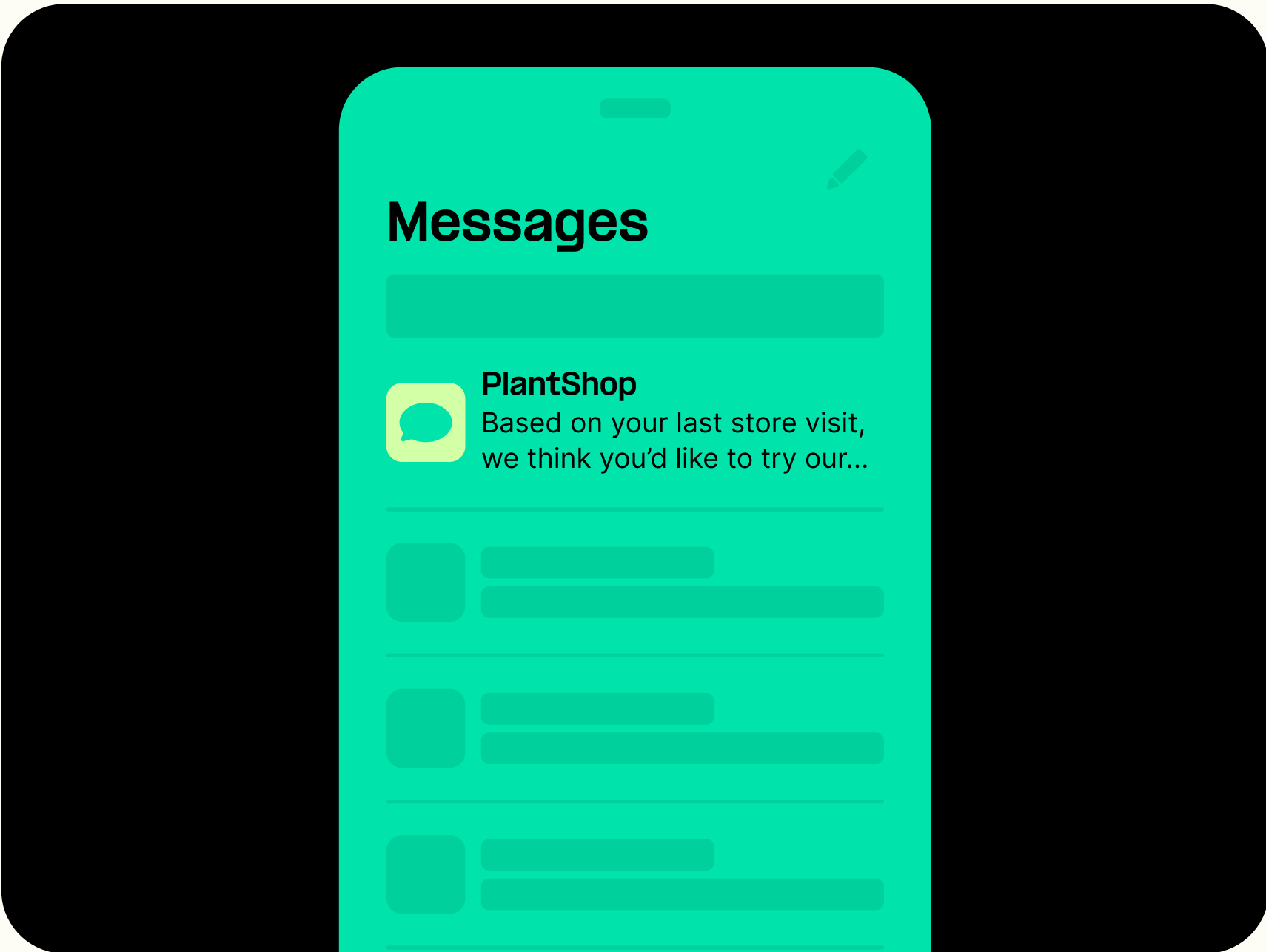
Short code

Five- or six-digit number used to send messages to and from mobile devices. Primarily used to send one-way text communications to a vast network of recipients very quickly.



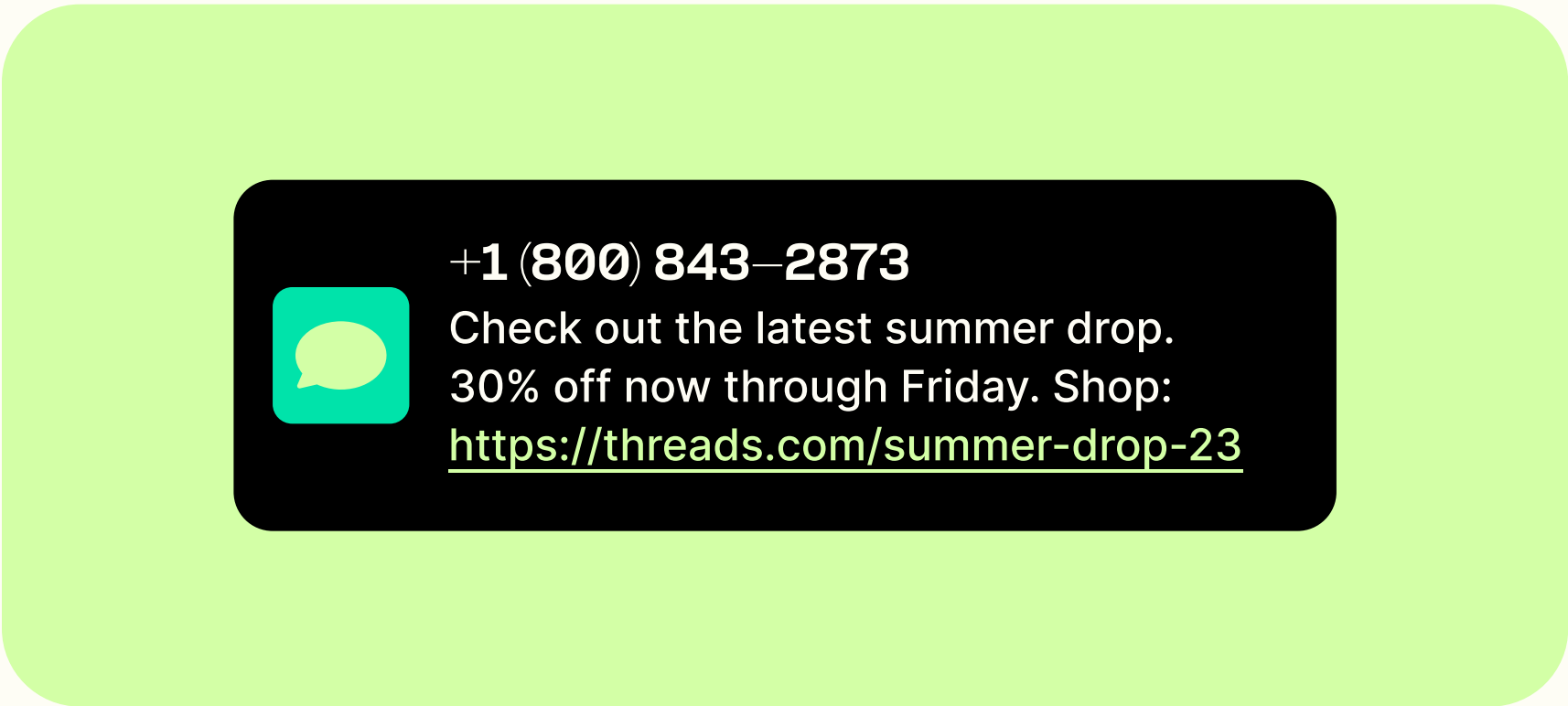
Alphanumeric sender ID

Similar to short code but only supports outbound SMS and isn't available in North America. Helps promote your brand globally with a maximum character limit of 6–11 (depending on the receiving country).



Toll-free messaging

Service that enables users to send and receive messages from a toll-free number.



Throughput and volume

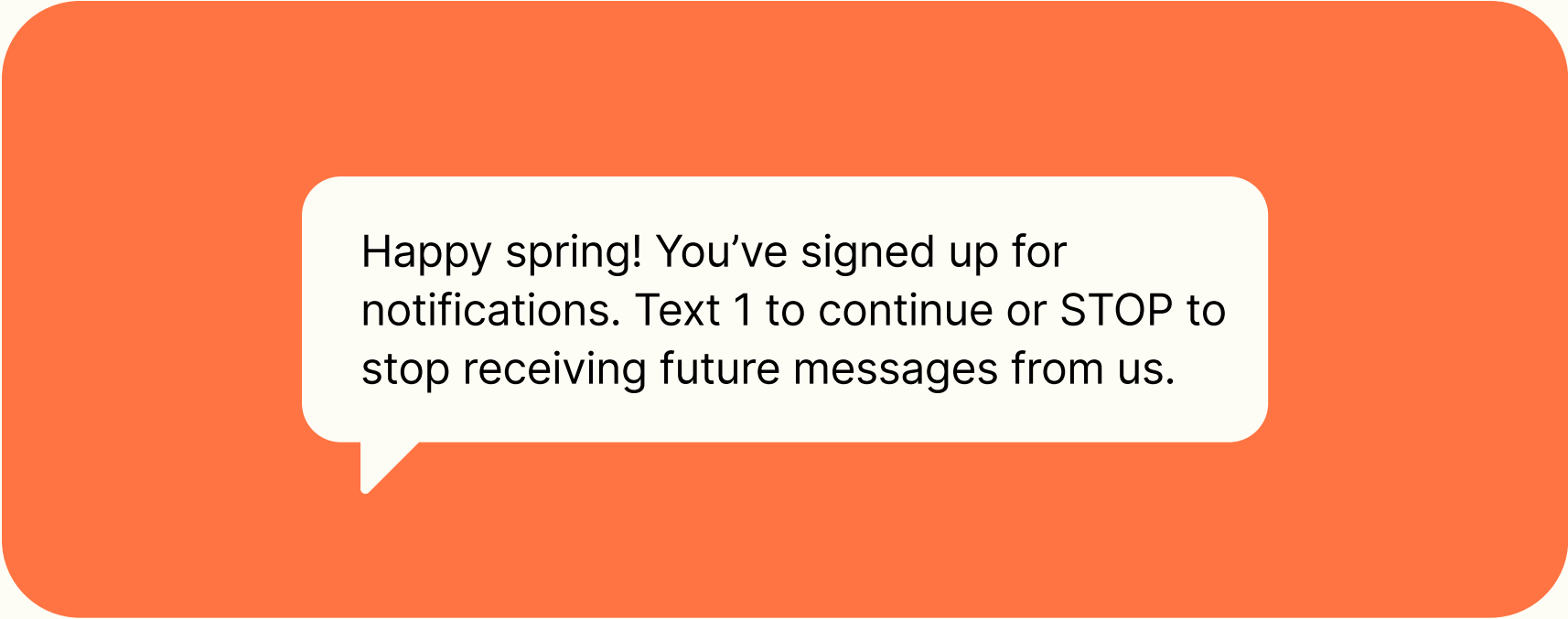
Refers to the number of messages that can be sent and received over a given time period.

DLR (Delivery Receipt)

Automated message sent by the network to indicate that an SMS message has been successfully delivered.

Stop word

Specific words such as STOP or UNSUBSCRIBE that signal that a recipient no longer wishes to receive messages from a sender.



Spam stop words

Words or phrases used to identify unwanted or inappropriate content in messages.

Encoding

The process of converting data from one format to another. Used to ensure messages are properly formatted before they're sent.

# Our research sample: 1B+ messages

Learn best practices from top performers.

**Our sample set primarily consisted of B2B2C businesses, SaaS providers, and SMS/MMS outreach specialists, including political outreach categories.**

The vast majority of these messages were used to send notifications (e.g., account notifications, order tracking notifications, etc.), conduct [marketing and outreach](#), and start or continue two-way conversations (e.g., customer support).

## Understanding delivery rates

When it comes to SMS delivery rates, many people overestimate what they should expect from their campaigns. Anecdotally, our experts have often found customers' actual delivery rates are 5–10% lower than they believed. Though they don't realize it, many customers are underperforming. We often see customers underperform when they're not following best practices.

At Telnyx, our top-performing customers consistently delivered 18.4% more messages than average and 22.5% more than low performers. Which begs the question:

## What do top performers do differently?



Top performers tend to have:

- ▶ Clean send lists, which are regularly scrubbed for inactive or invalid numbers
- ▶ Good opt-in practices
- ▶ Complete and correct registration with relevant regulators
- ▶ Content checked against relevant standards (such as [10DLC Forbidden Content](#)).
- ▶ Throughput that matches their declared volume at registration



Conversely, customers who don't observe these best practices have much lower delivery rates. We noted that there was typically no significant difference in delivery rates between:

- ▶ Countries of origin
- ▶ SMS and MMS
- ▶ High and low short code performers—performance of this number type tends to be very strong. We speculate that this is due to an intensive up-front vetting process and the fact that number tending is more popular with companies who have advanced SMS and MMS knowledge.

## Common delivery issues

When optimizing your SMS delivery rates, it's essential to understand the common causes of unsuccessful delivery. The overwhelming majority of undelivered messages sent via Telnyx received error codes related to basic, easily fixed issues. Let's take a closer look.



The largest group of specific delivery issues (26%) are related to invalid recipient numbers. Be sure to double-check that all numbers you wish to send messages to are valid and up-to-date.

Almost a third (around 30%) of undelivered messages are flagged as non-compliant by the carrier or aggregator. There are typically two causes here:

First, the content is not compliant with guidelines set by carriers and aggregators. To prevent this issue, ensure your message content meets the guidelines set out by carriers and aggregators and that you're sending messages through a reliable and compliant platform like Telnyx.

The second major cause is that the throughput of the sender doesn't match the expected amount. Throughput limits are governed by the number type and any relevant registrations. For example, brands with a high 10DLC trust score are allowed to send more messages per minute.

To correct these issues, we recommend:

- Ensuring you complete appropriate registration checks.
- Working with a [vendor](#) with a high level of expertise and built-in controls.

The remaining issues were due to generic delivery errors. Unfortunately, many carriers do not provide details as to why a message wasn't delivered. We believe the best way to investigate this type of scenario is careful testing supported by expert advice. A good vendor will provide strong investigative expertise and regular, proactive internal testing to identify and resolve issues across carriers, geographies, and other segmentations.

## Message costs and unsubscribes

Message length can be a significant challenge for customers in terms of cost and throughput. Limit your SMS messages to 160 alphanumeric characters or fewer to ensure quick and accurate delivery. Long SMS messages are more likely to get stuck in spam filters, which can delay or prevent message delivery. When an SMS message exceeds 160 characters, the message is automatically broken into multi-part SMS messages.

Since vendors, aggregators, and carriers measure and charge per message part—not per message—sending multi-part messages can unintentionally exceed throughput limits and result in unexpected charges.

**Moving to Telnyx for Messaging provides a multitude of benefits to our customers:**

# 15%

HIGHER RATING FOR PERFORMANCE AND USABILITY, ON AVERAGE, THAN OUR LARGEST COMPETITOR

# 30%

LOWER COSTS ACHIEVED BY OUR CUSTOMERS, AT THE AGGREGATE LEVEL, THAN THEIR PRIOR MESSAGING SOLUTION WITH ZERO DEGRADATION TO SERVICE QUALITY

# 80%

REPORTED HIGHER SATISFACTION THAN WITH PREVIOUS PROVIDERS. THEY POINT TO A MORE SEAMLESS, ENJOYABLE EXPERIENCE WITH [OUR EASY-TO-USE PLATFORM](#).

# 20%

INCREASED MESSAGE DELIVERABILITY FOR MANY

Finally, it's essential to keep an eye on your unsubscribe rate. Our team aims for an unsubscribe rate of less than 3%. Other vendors and aggregators suggest aiming for rates between 2–5%. An overly high unsubscribe rate can lead to your messages being flagged as spam, further decreasing deliverability.

*In the next section, we'll dive into specific ways you can maximize your delivery rate to reach more customers.*



# Common SMS issues and questions explained

**Our team of experts is always happy to answer customer questions. Here, we've compiled the questions we receive most frequently, along with our explanations.**

## What does this error code mean?

One of the most common SMS and MMS issues customers encounter is error codes. Error codes indicate issues that may prevent your SMS or MMS from sending or from being received. These errors can be caused by various issues, from network connectivity problems to invalid phone numbers.

Fortunately, you can quickly resolve most error codes by checking the phone number, network connection, or message content. However, a Messaging expert can provide further assistance if the error persists. Here are the top four codes our customers ask about and what they mean:

CODE	WHAT IT MEANS
40001	Not routable (destination number is a landline or a non-routable wireless number)
40012	Invalid messaging destination number (the destination phone number was deemed invalid by the carrier and was rejected)
40002	Blocked as spam
40018 or 40016	10DLC sending limit reached (exceeded throughput limits for allocated use case)

## How can I maximize my delivery rate?

### 1. Check your numbers.

The first and most crucial step in maximizing your delivery rate is to make sure the numbers you're sending to are valid, active numbers. You can use a number lookup tool like the [Telnyx Lookup API](#) to verify the status of any phone number. Verifying the validity of numbers on your list is a simple way to reduce the number of messages that are not delivered.

```
1 import requests
2
3 url = "{{baseUrl}}/number_lookup/+18665552368?
4 type=caller-name"
5
6 payload={}
7 headers = {
8   'Authorization': 'Bearer <token>'
9 }
10
11 response = requests.request("GET", url,
12 headers=headers, data=payload)
```

In addition to verifying numbers, you should also make sure your messages are formatted correctly. The standard for SMS is [GSM-7 encoding](#), with many carriers also accepting [UTF-8](#) (which includes character types like emojis).

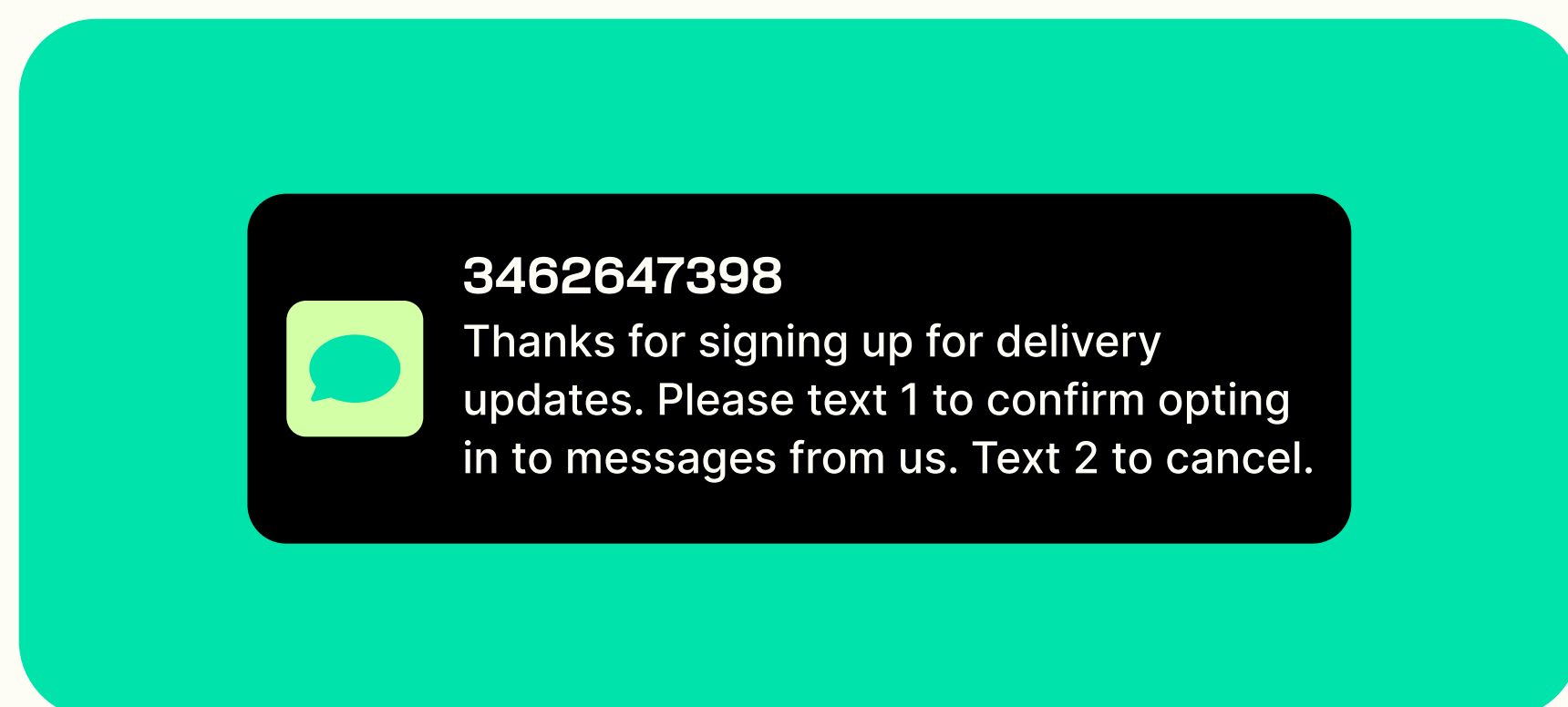
### 2. Don't be spammy.

One of the most critical aspects of using SMS and MMS as part of your business strategy is to ensure that you follow all applicable [compliance best practices](#). Taking time to understand the relevant laws and [regulations](#) is essential to ensure that you and your business are not in violation.



To avoid your communications being marked as spam, it's important to be mindful of the various regulations and regulators governing SMS and MMS use. In the U.S., these include the Telephone Consumer Protection Act (TCPA), Cellular Telecommunications Industry Association (CTIA), SHAFT, and 420-related restrictions.

The TCPA is a federal law designed to protect consumers from unwanted texts. It requires consumers to express written consent (or opt-in) before companies can send them any messages. The CTIA is a trade association that provides best practices for companies regarding SMS messaging, including being upfront about volume and frequency, including your business name, and providing an opt-out option.



Finally, you should also keep an eye on upcoming legislation, like the [Notice of Proposed Rulemaking \(NPRM\)](#) and rules on robo-texting, to stay up to date with the latest regulations.

Another way to gauge if your SMS messages are compliant is to ask yourself: If I was in the recipient's situation, would I be comfortable receiving this type of message from a company? If not, it's likely your recipient wouldn't be comfortable receiving it, and you should adjust your content accordingly.

You can read our [Compliance Guide](#) to help demystify some of the rules and regulations surrounding messaging. And, of course, always consult with your legal team and any supporting experts you can access.

Depending on the type of SMS service you're using (e.g., A2P or P2P) and who you're sending messages to (e.g., U.S. or international numbers), you may want to register your business for 10DLC or toll-free messaging. 10DLC and toll-free messaging are other ways to ensure your messages are sent quickly and routed through the most efficient networks.

### 3. Get your throughput limits right

You need to know the registered use cases, brands, and other information associated with the numbers you're sending to. Knowing this information is key to ensuring you're not exceeding your throughput limits—another major cause of undelivered SMS messages (particularly with 10DLC).

Depending on the numbers you're sending to, the limit may be anywhere from one message every two minutes to one message every five seconds.

The CTIA sets throughput limits, so you'll need to check the limits associated with your numbers. Certain numbers may be registered with the use case of "promotional or informational messages," while others may be registered with the use case of "transactional messages." For example, transactional messages may have higher throughput limits than promotional or informational messages.

### How do I get the best deal on pricing?

Pricing for SMS messages can vary depending on the type of number, carrier, location, message content, and message type.

To get the best deal on pricing, it's important to ensure that you craft your message parts carefully to fit within character limits. A message part is normally 160 characters, but encoding can change this. For example, emojis convert to Unicode, which results in a 70-character limit per message part. If you exceed the character limit, the message will automatically be split into multiple parts. Since carriers charge per part, not per message, you want to be economical with your words to save on sending costs.

You'll want to consider the length of your message when it comes to marketing media, such as email. Shorter messages tend to outperform longer ones, so it's worth considering sending your message as a multimedia image instead. Chances are, you'll see a higher return on investment.

Finally, you'll need to determine how the destination carrier calculates pricing. Some carriers may charge additional fees for multimedia message support, so it's important to keep this in mind when determining the cost of sending SMS messages.



# Choosing your SMS and MMS provider

**Choosing a messaging provider can be a daunting task, and your end result depends on making the right choice. We've put together a list of seven criteria to keep in mind.**



## **Cost-effectiveness**

Is the provider a carrier with their own network, or are they a network reseller? By skipping the middleman and working directly with a carrier, you could save up to 70% on your messaging bill.



## **Number availability and expertise**

Does the provider have a large inventory of numbers and area codes to choose from? Whether you want a local area code or an easy-to-remember number, a more extensive number inventory gives you more options. Do they support and understand the intricacies of all four major number types, as well as any character set?



## **Full set of features**

Does the provider offer features to help you purchase, register (for messaging), and manage numbers at scale? Do you need the ability to send customer communications from multiple numbers? What about sending messages from local numbers? Even if you don't need these options now, consider where your business could be in a few years. You'll want to look for a provider that offers a layer of intelligence over and above core messaging services so you're not stuck when it comes time to scale your communications.



## **Deliverability reports**

Does the provider offer robust reporting and analytics? Do they provide delivery reports and expert advice to explain when messages haven't gone through and why?



## **Easy implementation**

Messaging is complex to scale. Are the provider's APIs developer-friendly? Do they offer 24/7 support at no extra cost? Unless you have a large team of tech wizards, look for a provider with extensive resources designed to help you get started (developer documentation, a Slack community, etc.). Do they offer rapid porting options for pre-existing messaging-capable numbers?



## **Compliance assistance**

Messaging regulations can be tricky to understand, so you should look for a provider that offers built-in compliance and delivery controls, as well as improvements like long message concatenation and opt-out management.



## **Quality support**

Do they offer expert support? Your provider should offer round-the-clock support, and you shouldn't have to pay extra for it. Of course, the quality of your support matters, so choose a provider that consistently receives high rankings for customer support.



# Partner with a connectivity company designed for the future

TALK TO AN EXPERT

Telnyx is a [next-gen communications platform](#) that provides carrier-grade services on a global private IP network. We control the network end to end, own approximately 8 million numbers, and have multi-cloud redundancy.

Our [APIs are built by developers, for developers](#), so you can build high-quality messaging capabilities into your existing apps with ease. In addition, Telnyx provides the tools to underpin your SMS strategy, which frees you up to have engaging, insightful customer conversations. Whether you're using messaging to improve customer satisfaction, boost conversion, increase productivity, or reduce costs, you can leverage our reliable, private network, intuitive APIs, and intelligent features to drive your business forward.

Founded in 2009, Telnyx is a [licensed carrier in over 30 countries](#). Cutting out the middleman allows us to drive efficiencies, provide our customers with better products, and set industry standards for price, value, and quality. Partner with Telnyx to build your ideal communications solution with all the support and guidance you need to grow and scale your business.





Visit [telnyx.com/SMS](https://telnyx.com/SMS) to learn more about our messaging offering.