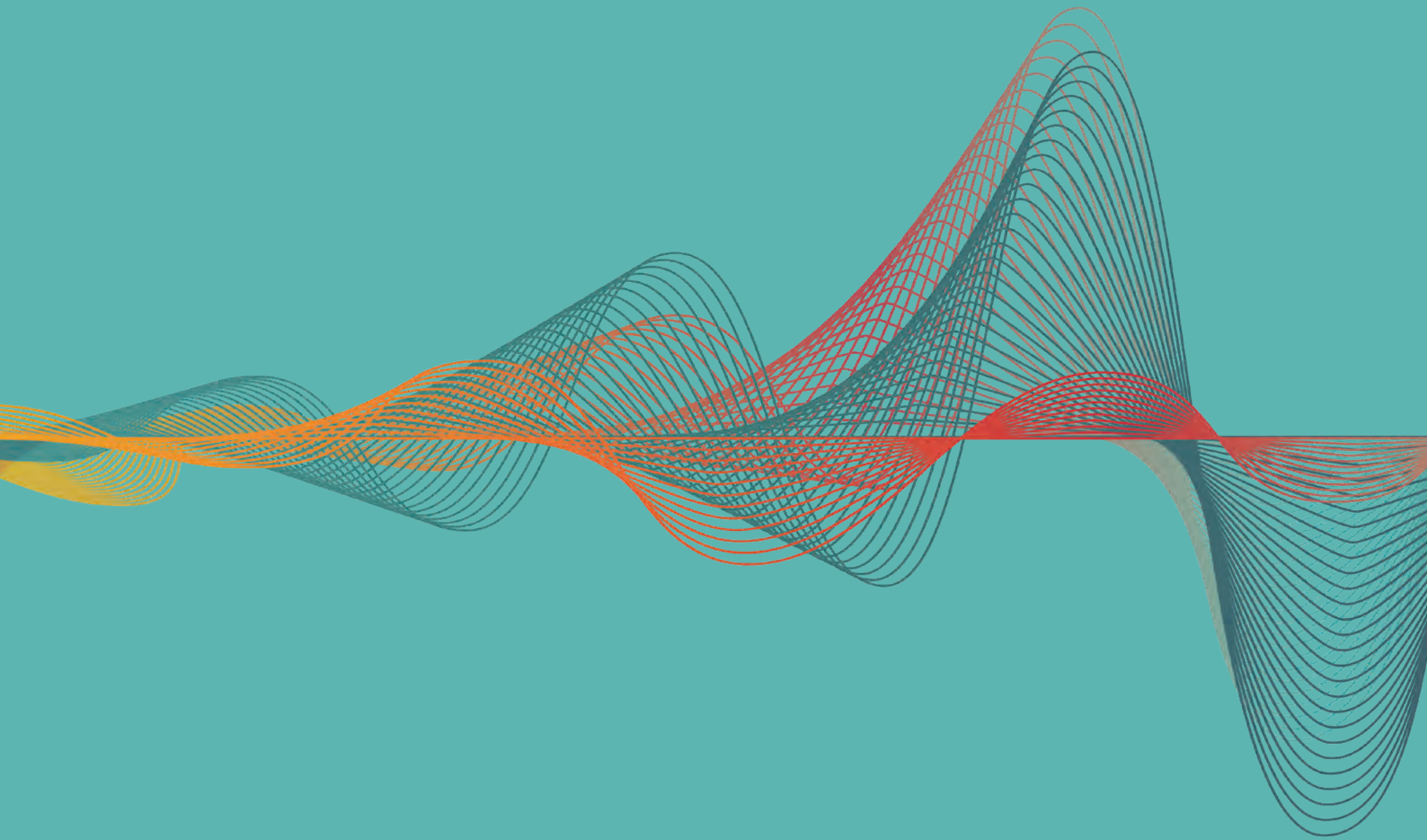


# Voice You Can Trust: Building a Brighter Future for Global Voice Services



**wavecrest**  
fanatical about voice

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## introduction

Over our decades in business, Wavecrest has seen the international voice industry evolve significantly. Throughout, we've kept pace with those changes, modernising our service in response to what customers want and new technology enables.

Now we're modernising again. Reflecting today's transformed landscape, we've built a platform that connects telecoms operators and cloud communications providers. Our platform is open, scalable and fully compliant.

But most of all, it addresses one issue that we've heard about from all parties in the sector: fraud. Fraud has become such a problem for the voice industry globally that we fear it threatens our collective future.

In this whitepaper we wanted to set out our thinking on fraud, our approach to tackling it, and our view on trust in telecoms more broadly. So while this document has been authored by Wavecrest, and as such sets out our opinions, it has also been informed by conversations with industry experts at other organisations. This includes representatives of international telcos, technology providers, and industry bodies.

We hope this paper contributes to the much-needed conversation about where our industry must change, and how best to bring that about. The time for action is now.

**Andrew Bale**  
**CEO, wavecrest**



## the power of voice

Communication has never been more vital to business.

In our increasingly service-based and knowledge-driven economy, the ability to stay in touch and talk to others is key. That's true whether the use case is communicating and collaborating internally, or providing a great experience to customers through ordering and support.

In addition, companies today are becoming more dispersed and more global in nature. Remote and hybrid working has become embedded for millions of organisations worldwide - according to McKinsey, office attendance globally is still 30% lower than before the pandemic. Teams increasingly operate over multiple countries and time zones too - data-flows across borders have increased nearly 50% annually in recent years.

All of these factors explain why voice remains a powerful complement to video and chat technologies. Voice puts people in touch with each other, as other forms of communication become increasingly automated and algorithmic.

It provides businesses with the choice and flexibility they demand, and answers needs that other methods can't.

But the success of voice is under threat.

*"Voice is almost a 'hidden infrastructure' that's still very important but not always getting the attention it used to. Voice today still plays an important part in many organisations."*

**CHARLIE DOUBEK**  
VP Managed Collaboration and Communications,  
NTT Cloud Communications UK

## our industry's burning platform – voice fraud

International voice's biggest challenge is from fraud - indeed, we believe it's an existential threat to the entire industry.

This fraud comes in two types. The first type is arbitrage and artificially inflated traffic that hits carriers. Bad actors are using the technical complexity of this market, and the new IP-driven technology underpinning it, to find ways to make fake calls and rack up large charges. Often this traffic is generated by automated bots, to be as lucrative (and hard to trace) as possible.

Legitimate businesses can then get blamed for some of this activity, with serious consequences. Research from dialler software firm PhoneBurner found that 78% of the US companies it surveyed had lost at least one employee position and 81% had lost revenue, due to their calls being wrongly labelled as fake or dangerous. Worryingly, 15% of companies reported losing over \$100,000 in revenue.

The second type of fraud hits consumers directly. As activity such as spamming, spoofing and phishing persists - and indeed booms - the public are starting to lose faith in the validity and veracity of voice calls.

The voice industry has arguably been guilty of focusing more on the first type of fraud than the second, perhaps because it hits carriers in their pocket more immediately. But the risk with the second category is that regular consumers lose trust in voice calls entirely, and this slowly erodes the foundations of the industry over the longer term.

Arguably we're already seeing evidence of this in reduced rates of answering phone calls. Multiple studies in recent years have highlighted this trend. According to a Pew study, 80% of US adults no longer answer phone calls from unknown callers - but other studies have put it as high as 87% or even 98%. Whichever figure you trust, the frightening reality for the voice industry is that if vast swathes of consumers don't answer their phones, the negative impact on business is huge.

Unless we act fast, we risk losing revenue and ultimately becoming irrelevant to the public.

*"The risk of fraud remains an ever-present threat in the international voice market. The complexity of the voice market itself creates a very fertile environment for fraudulent activity, including arbitrage and fake traffic."*

**MIKE CHALMERS-HUNT**  
Senior Fraud Manager, Vodafone

*"Not a day goes by where we don't see scam after scam after scam. Globally, the telephony system has fallen into disrepute, resulting in increased focus by regulators and other non-telco bodies."*

**MIKE CHALMERS-HUNT**  
Senior Fraud Manager, Vodafone

## responding to regulators and tech partners

All of this is coming into focus now because voice fraud has reached a tipping point.

In essence the problem has become so severe that it's motivating regulators into urgent action to protect consumers and stop a burgeoning area of crime. For example, data from Truecaller suggests US consumers lost \$40bn from phone scams in 2022 alone, with 68m people affected - a cost of about \$588 for each victim.

For carriers and providers in this market, a dynamic approach from regulators can be commercially problematic. Sudden changes can disrupt industry business models, put revenue streams at risk, and add enormous complexity to operations.

We have already seen this happen in France, for instance, where the regulator's ban on sub-allocation stopped providers from taking the phone numbers they had been allocated and selling them on to other firms. Overnight, this broke many companies' products and services.

This kind of announcement is concentrating minds and forcing industry players to move on this issue without delay.

There's another factor compounding the complexity of this challenge, however. That's the cultural and technical disconnect that too often exists between the two sides of today's market: traditional telco operators and newer, tech-driven cloud communications providers.

They frequently have different perspectives on the importance of fraud and the best ways to address it, born out of their differing experiences and business models. Fundamentally, they often do not speak the same language or share the same mindset. This stifles successful collaboration, innovation and efforts to address key issues like fraud. It risks holding back the industry's future growth.

**"Each regulator has a different approach and angle, mandating different policies and technologies. Now there are dozens and dozens of different requirements globally. That gets very complex and very costly to implement."**

**PHILIPPE MILLET**  
Founder and Chair, i3Forum

## envisioning a better future

What would the voice market look like, if we solved the problem of fraud?

We believe the end goal should be simple - to ensure every consumer can feel complete confidence in who is calling them. Ideally they should know who is calling before they pick up, and know that the caller is who they say they are. They might even be provided with some information as to why they are being called.

Here we can take inspiration from other industries, such as financial services in the UK. Thanks to industry-standard technology and regulatory rules, anyone making a payment can get confirmation that the recipient's bank account details match up to their identity. The veracity of the payee is authenticated in advance. If the payment is large, they can even receive warnings to confirm and double-check the amount, the account details, or the reason for the transfer.

All of this reinforces trust within the system and cuts down on fraudulent payments. But it requires far stronger identification and authentication processes than we currently have in the voice

industry. Such attestation, as it's known, depends on both great technology and trusted processes that every stakeholder supports. Every player must work together to increase transparency along the call chain and thereby improve trust.

Our sector is still some way off from this end state - as the lukewarm response to the FCC's well-intentioned STIR/SHAKEN protocols demonstrates (after billions of dollars of investment in these protocols, over 70% of all calls received are still unsigned). But it provides a vision of a future where voice calls come with a "green tick" of authentication, people are far more likely to answer their phones, and the value of voice communication is massively enhanced.

**"We may be competitors, but when it comes to fraud we're collaborators. No one party has the complete chain, and there are barriers in the way. We've got to find ways to open up and have honest conversations with each other. We don't have complete transparency yet, and that's part of the problem."**

**MIKE CHALMERS-HUNT**  
Senior Fraud Manager, Vodafone



## bringing back trust, transparency and ease

At Wavecrest, we are committed to making this future vision a reality. Our mission is to bring trust, transparency and ease back to the international voice market.

We believe there are three pillars of activity needed to achieve this.

1

Most urgently, we must create new systems and processes to underpin how voice is deployed, routed and tracked.

We need a fundamentally different approach to managing and minimising the risks and challenges that have grown up around the voice sector as it has developed globally. The key risk is, of course, fraud itself.

2

We must simplify how voice is run, reported and priced. Too much technical complexity and opacity has accrued in the industry over the years, providing cover for bad actors. By drastically streamlining these elements, we can re-build confidence across all parties, and expand opportunities for growth too.

3

We must bridge the gap between the telco and tech worlds that make up today's global voice industry. While they both have enormous strengths, at root they often have different goals.

We need to find a way to bring them together in common cause, capitalising on what each does well. By doing so, we can enable voice to work seamlessly within the digital unified comms and cloud platforms that represent the future of business communications.

Bodies such as the i3Forum's One Consortium - of which Wavecrest is a founding member - are important to achieving this, and we need more such collaboration.

**"Despite notable efforts by a number of major industry initiatives - such as the i3Forum, GSMA and the Global Leaders Forum - the industry as a whole has been slow to ramp up its fight against fraud. But now we're waking up and getting our act together. There is a collective sense of urgency; we know the industry needs to keep doing better - working with the regulators."**

**PHILIPPE MILLET**  
Founder and Chair, i3Forum

## benefits to all

Taking the approach set out above, Wavecrest's platform benefits all stakeholders in the international voice industry - from traditional telcos to the modern cloud communications providers, as well as the end users making and receiving calls.

For cloud players, we provide the voice and messaging functionality their customers want, as part of an enterprise-grade managed service, with industry-leading compliance and fraud management. We help fill a key gap in their platform offering. We also help futureproof them against regulatory changes.

For telco operators, we provide value to rangeholders, monetising their assets and delivering verified traffic. Moreover, we help them tap into the rapidly growing cloud communications market with ease.

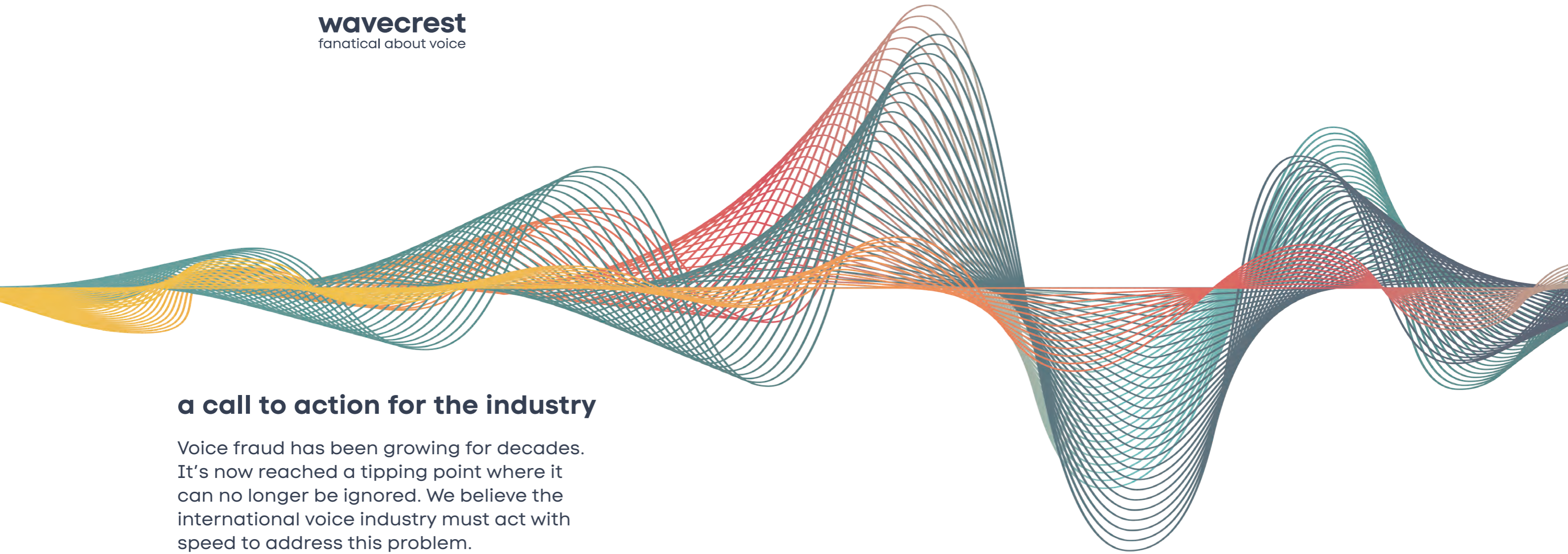
And for end-user customers, we enable the voice and messaging services that help them collaborate internally and provide an outstanding customer experience externally. All underpinned by enhanced trust in who they're calling and who's calling them.

**"I think people are underestimating how many firms are still on-prem. They think we're already at saturation point and everyone's moved to cloud comms platforms. But actually the hardest customers are only just starting to move, and they have so many requirements you need to be there for."**

**CHARLIE DOUBEK**  
VP Managed Collaboration and Communications,  
NTT Cloud Communications UK

**"The cloud vendors do rely on more traditional telephony for some services to work, but come to the 'fraud table' from a differing perspective as they grasp the 'techno to telco' environment - whilst we perhaps are doing the reverse."**

**MIKE CHALMERS-HUNT**  
Senior Fraud Manager, Vodafone



## **a call to action for the industry**

Voice fraud has been growing for decades. It's now reached a tipping point where it can no longer be ignored. We believe the international voice industry must act with speed to address this problem.

At Wavecrest, we've built a platform to provide a new way of doing things. We urge telecoms operators and cloud communications providers to join us in our mission.

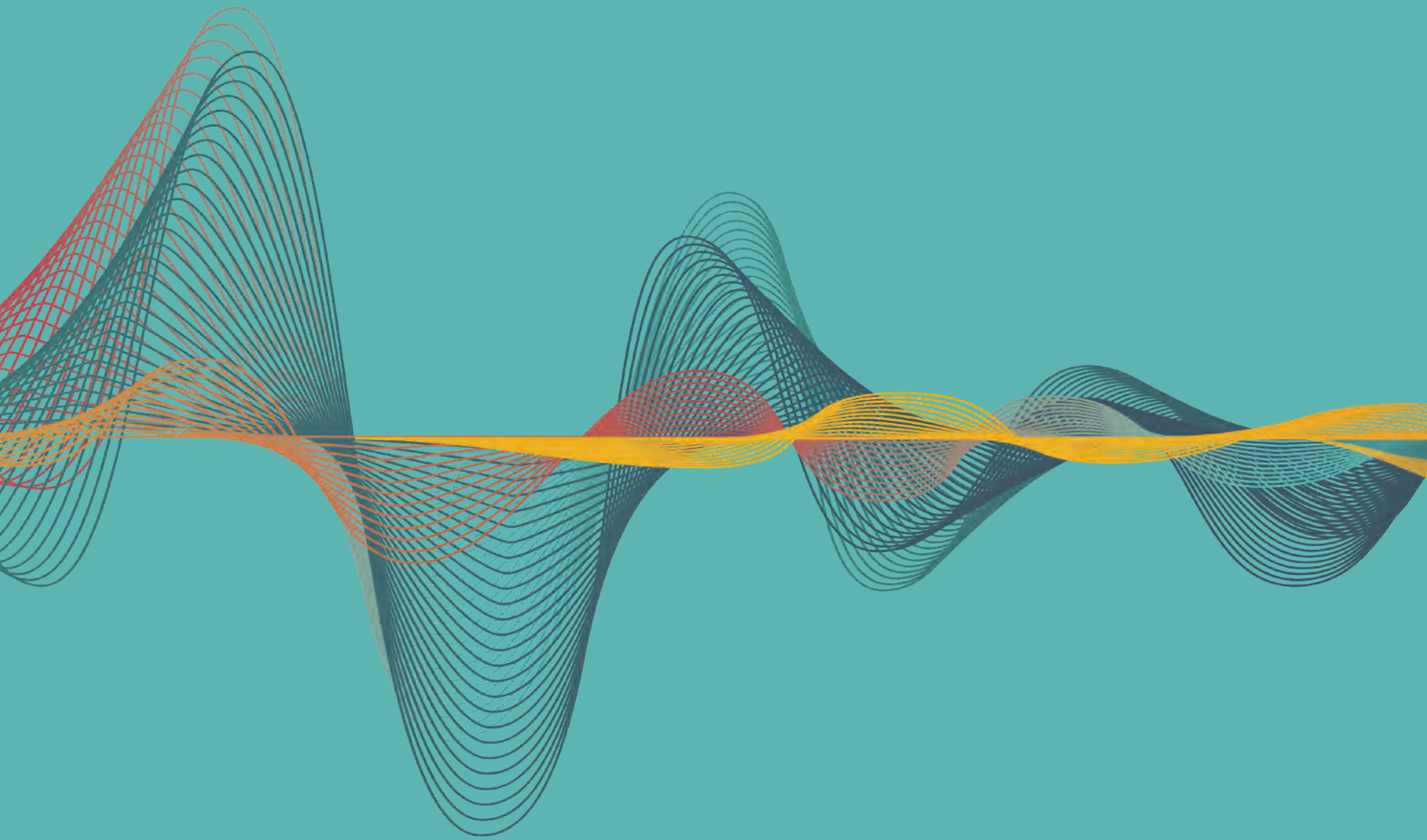
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