

■ FOR CONTENT PROVIDERS

How live sports exposed streaming's infrastructure problem

What content providers need to ask of their CDN partners now

Contents

Introduction	03
Why live sports pressure the system differently	08
Why content providers should care about ISP pressure	14
Why traditional CDN models are under strain	20
Six principles for modern CDN delivery	25
What content providers should ask now	33
For content providers, delivery has become a competitive capability	38

■ CHAPTER 01

Introduction

The familiar rhythm of demand has frayed

The calendar has become denser, and the audiences larger.

For years, streaming needs and usage followed a familiar rhythm. Demand rose in the evening, softened overnight, surged around a major release, and occasionally spiked during a marquee event. That rhythm has frayed as premium live sports, global events, higher-bitrate formats, and more connected devices push streaming systems into more frequent moments of extreme pressure.

In less than a year, streaming infrastructure has moved beyond preparing for the occasional traffic spike and **now has to absorb multiple surges throughout the day**, often across different sports, regions, and time zones. The calendar has become denser, and the audiences larger.

Streaming's share of viewing keeps rising

In May 2025, Nielsen reported that streaming surpassed the combined share of broadcast and cable viewing for the first time, reaching 44.8% of total TV usage. By May 2026, streaming had climbed to 48.6% of total TV watch-time. **Sports are following the same migration path:** Parks Associates found that 40% of U.S. sports viewers now watch sports only through streaming services.

44.8%

STREAMING SHARE OF TV USAGE,
MAY 2025

Source: Nielsen

48.6%

STREAMING SHARE OF TV WATCH-
TIME, MAY 2026

Source: Nielsen

40%

U.S. SPORTS VIEWERS WHO
WATCH ONLY VIA STREAMING

Source: Parks Associates

They press play, and the stream either keeps the promise or breaks it in public.

Amid these shifts, the margin for failure in streaming has become vanishingly thin, and viewers do not sort responsibility across the delivery chain. They do not know which CDN, ISP, device, player, route, cache, or regional node shaped the experience.

■ THE TAKEAWAY

What this means for content providers

For content providers, the takeaway is practical: **Your delivery stack has to be evaluated against repeated surge conditions rather than average demand.** That means understanding whether each CDN partner can scale around multiple event windows, see what is happening inside access networks, and protect quality when live audiences collide.

01

Scale around
multiple event
windows

02

See what is
happening inside
access networks

03

Protect quality
when live
audiences collide

■ CHAPTER 02

Why live sports pressure the system differently

■ CHAPTER OVERVIEW

Live sports compress demand in ways most streaming categories do not.

Millions of viewers arrive together, request the same content, and expect the experience to hold through the entire event window. The value of the stream is highest at the moment the network is under the most stress, which **turns delivery quality into part of the product experience.**

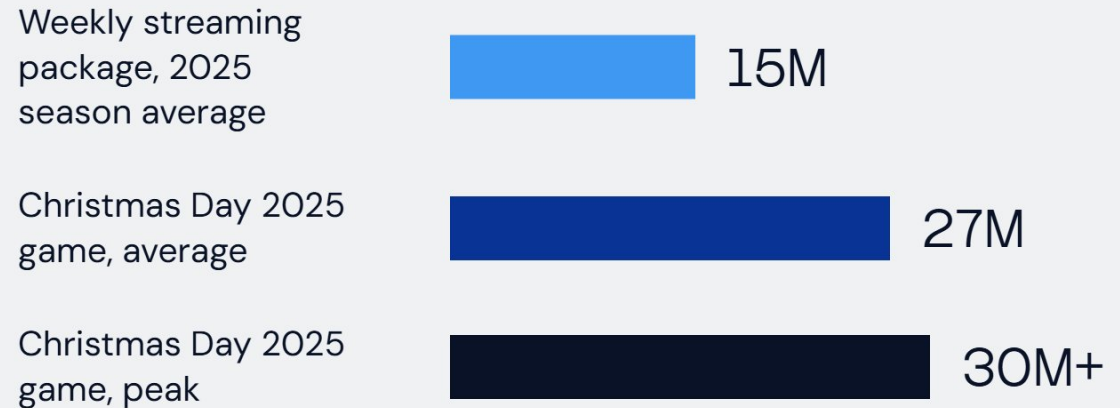
■ CALLOUT

The compression problem

A weekly streaming-led NFL package averaged 15.33 million viewers during the 2025 season. On Christmas Day 2025, one NFL game averaged 27.5 million U.S. viewers and peaked above 30 million, while Nielsen recorded 55.1 billion streaming minutes across the day.

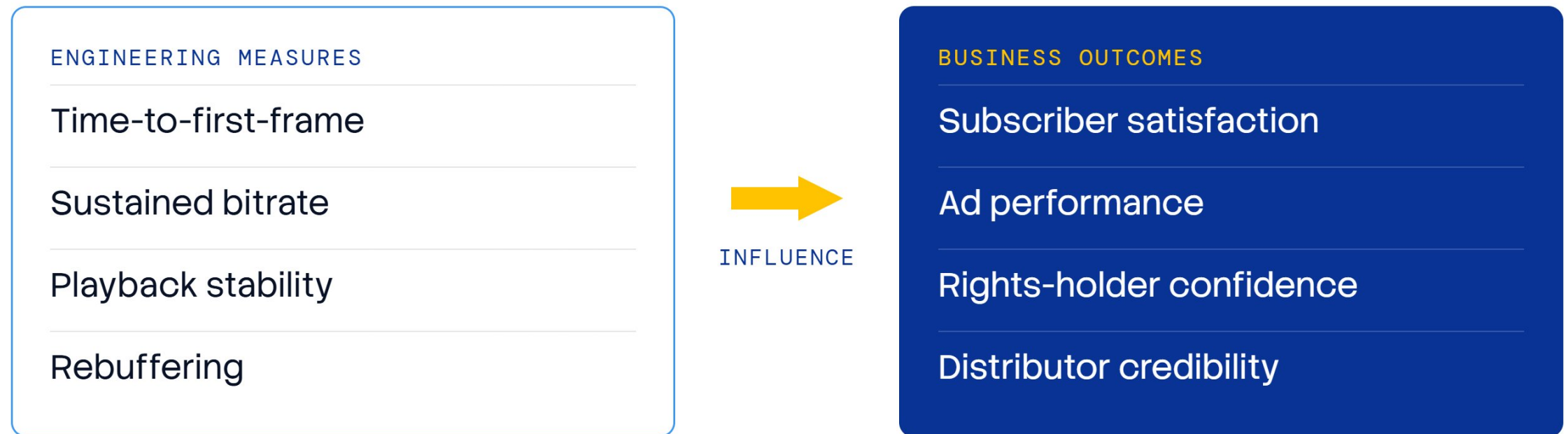
A library title can gather its audience over days or weeks; a live sports audience **arrives on the clock**, concentrated into a narrow window, with expectations shaped by decades of traditional TV reliability.

U.S. VIEWERS, NFL ON STREAMING



Quality is now a business measure

That changes the business meaning of quality. Time-to-first-frame, sustained bitrate, playback stability, and rebuffering **have become more than engineering measures**. They influence subscriber satisfaction, ad performance, rights-holder confidence, and the credibility of the distributor during the moments audiences care about most.



A denser live calendar

The calendar makes this pressure harder to contain. Premium rights are spreading across digital services, global sports events are drawing massive concurrent audiences, and regular league schedules create overlapping peaks across time zones.

The 2025-26 cycle marked an inflection point. Streaming had already surpassed the combined share of broadcast and cable viewing in the U.S., while major sports rights packages were placing more premium games across internet-delivered services. At the same time, the live calendar was becoming more compressed: the 2026 Winter Olympics featured 116 medal events, and the expanded 2026 FIFA World Cup packed 104 matches into 39 days. The result is a delivery environment shaped by more live windows, more overlapping audiences, and higher expectations for broadcast-grade reliability.

116

medal events at the 2026 Winter Olympics

104

matches in 39 days at the expanded 2026 FIFA World Cup

A few seconds of buffering during an ordinary program may be annoying.

A few seconds of buffering during a decisive play feels like a breach of trust.

That emotional asymmetry is what makes live sports the sharpest test of modern streaming infrastructure.

■ CHAPTER 03

Why content providers should care about ISP pressure

■ CHAPTER OVERVIEW

ISPs are crucial to the quality your subscribers experience, even when they are outside your direct customer relationship.

They share the pressure of live streams, and their networks often reveal **where delivery strategies are strongest or weakest.**

ISPs under strain

A recent Netskrt survey of professionals at 55 global ISPs found that **live sports streaming was the most stressful content category for service providers**. Seventy-eight percent of respondents said sports caused the most concern for streaming reliability, and nearly three-quarters reported network traffic spikes of up to 200% during live sporting events.

78%

of surveyed ISPs said sports cause the most concern for streaming reliability.

200%

Nearly 75% reported traffic spikes of up to 200% during live sporting events.

>50%

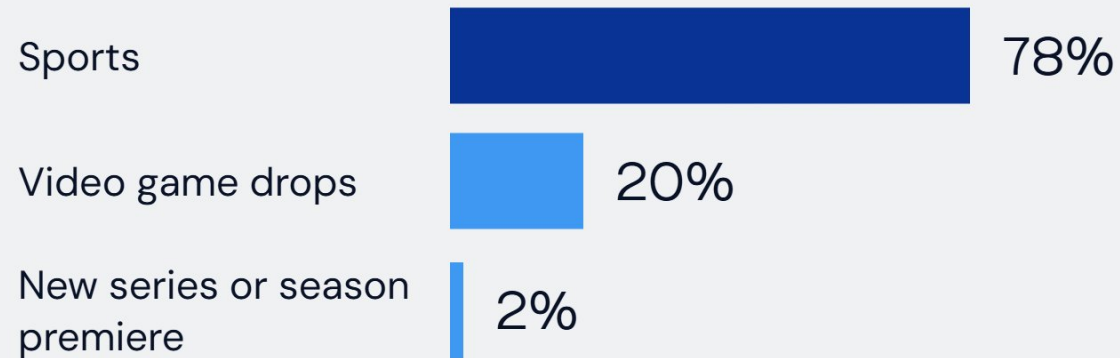
More than half identified congestion and buffering as recurring live-stream challenges.

77%

found monitoring functionalities highly or moderately beneficial.

Sports top the list of live-event concerns

WHICH LIVE EVENTS CAUSE THE MOST WORRY?



Source: [Netskrt ISP survey](#) · share of respondents

The survey also found that more than half of ISPs identified congestion and buffering as common technical hurdles during live streams, while **one-third named buffering as their top issue**.

The viewer never sees the map; they see slow starts, bitrate drops, and the spinning wheel.

Those numbers are important because **the last mile is where broad delivery plans turn into individual viewer experiences**. A regional architecture may look healthy while specific access networks, routes, or local pockets of demand show stress. The viewer never sees the map; they see slow starts, bitrate drops, and the spinning wheel.

■ THE ACTION ITEM

Visibility into the last mile

The stress often appears closest to the subscriber.

For content providers, the action item is to **treat last-mile visibility as a core requirement in CDN conversations**. If your team cannot see where pressure is forming, it is relying on after-the-fact complaints to diagnose an in-the-moment failure.

The audience relationship may sit with your platform, but the stress often appears closest to the subscriber. Your delivery strategy has to account for what happens inside ISP networks when multiple live events send demand surging at once, because **that is where broad planning turns into viewer-level performance**.

■ CHAPTER 04

Why traditional CDN models are under strain

Traditional CDNs made large-scale streaming possible, and they remain essential to the ecosystem.

Their original value proposition was straightforward: cache content closer to users, reduce latency, improve reliability, and help platforms reach broad audiences without carrying every request back to origin. That model worked well for web objects, software downloads, static assets, and more predictable on-demand video, **but the shape of traffic has now changed.**

Where conventional CDN models fall short

The capacity may sit underused when the event calendar quiets.

Conventional CDN architectures often rely on hundreds of large points of presence clustered around major metro areas, while live sports creates simultaneous regional demand that can **concentrate inside last-mile ISP networks where congestion is hardest to manage.**

Scaling those footprints for extreme peaks can require hardware deployments, capital spending, and network coordination, while **the capacity may sit underused when the event calendar quiets.**

What each CDN in the mix should contribute

Most content providers already work with multiple CDNs to ensure coverage, and those strategies remain important because they provide diversity, regional flexibility, traffic-steering options, and protection against individual provider failures. The next question is **whether each CDN in the mix contributes a clear strength:**

Last-mile
placement

Dynamic
capacity

Video-first
QoE
optimization

ISP visibility

Specialized
live-event
resiliency

You may be falling short if your multi-CDN strategy simply layers more capacity onto the same conventional model.

You need capacity placed closer to viewers, activated when demand requires it, guided by real network conditions, and supported by economics that allow delivery partners to keep investing.

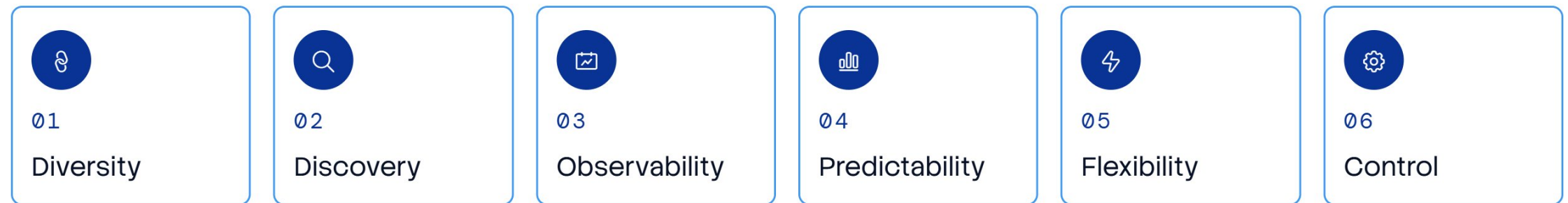
■ CHAPTER 05

Six principles for modern CDN delivery

■ SIX PRINCIPLES

Modern CDNs are building delivery models for a more dynamic environment, where network conditions change constantly and delivery systems must sense, adapt, and respond in real time.

For content providers, the practical takeaway is to **evaluate every partner against the following six principles**, because these capabilities determine whether a delivery stack can hold up when live demand surges.





01

Diversity

01 / 06

Modern streaming delivery depends on a distributed web of networks, providers, compute environments, and ISP relationships. No single route, partner, or infrastructure footprint can be expected to perform consistently under every condition, especially during major live events. **A resilient architecture needs multiple viable paths available at any given moment,** so traffic can shift away from degraded or constrained resources before viewers feel the impact.



02

Discovery



02 / 06

Redundancy only helps when the system knows which options exist and how they are performing. **Discovery means continuously identifying available routes, partners, edge locations, and delivery resources across the footprint.** It also means measuring latency, throughput, reliability, and coverage gaps so decisions are based on current network reality rather than assumptions from the last planning cycle.



03

Observability

In live streaming, performance issues can escalate quickly and become visible to large audiences within seconds. Observability gives operators the telemetry needed to detect problems across network and application layers while also understanding where those problems originate. **The goal is actionable visibility:** the ability to identify whether a route, node, partner, or local network condition is degrading performance and trigger mitigation before buffering becomes widespread.



04

Predictability

Real-time visibility is essential, but delivery systems also need to learn from recurring patterns. Historical performance data can reveal predictable congestion windows, common failure modes, regional demand patterns, and known contention points. With that intelligence, **traffic can be shifted ahead of expected congestion**, capacity can be positioned where it is likely to be needed, and teams can reduce the number of issues that require emergency intervention.



05

Flexibility



05 / 06

Insight only matters when the system can act on it quickly. Flexibility means scaling capacity up or down, adding resources in high-demand areas, removing underperforming paths, and adjusting routing policies as conditions change. This has to happen at a granular level and on short timelines, because live sports traffic can surge, migrate, and overlap throughout the day across different regions and events.

■ SIX PRINCIPLES



06

Control

06 / 06

A deeply distributed architecture needs a control layer that turns discovery, observability, and prediction into consistent action. That layer should evaluate network conditions, compute routing and resource-allocation decisions, and enforce those decisions across nodes, partners, and delivery paths. **The best model balances system-wide intelligence with local execution,** allowing the delivery fabric to optimize globally while still responding quickly near the viewer.

■ CHAPTER 06

What content providers should ask now

Your CDN conversations should move beyond unit cost and baseline coverage.

Those factors still matter, but they do not determine whether the stream holds during the moments that define the viewer relationship. **You need a more demanding scorecard for live-event readiness**, especially if premium sports or other live events are central to your growth strategy.

A live-event readiness scorecard

YOU SHOULD BE ASKING		YES	PARTLY	NO
01	Is this delivery architecture purpose-built for high-quality video, or adapted from general web delivery?	☐	☐	☐
02	Can it maintain time-to-first-frame, sustained bitrate, and low rebuffering during live event peaks?	☐	☐	☐
03	Does it place content close enough to viewers to reduce last-mile strain?	☐	☐	☐
04	Can capacity expand and contract dynamically around event windows?	☐	☐	☐
05	Does it provide visibility into ISP network conditions?	☐	☐	☐
06	Can it strengthen a multi-CDN strategy rather than simply add another commodity path?	☐	☐	☐
07	Does the model improve both quality and economics?	☐	☐	☐
08	Can it support higher bitrates, more devices, and larger concurrent audiences without requiring a fixed-infrastructure moonshot?	☐	☐	☐
09	Which specific role does each CDN play in the multi-CDN portfolio?	☐	☐	☐
10	What changes operationally when two or more major live events overlap in the same market?	☐	☐	☐
11	How quickly can the delivery strategy adapt when an ISP path, region, or partner becomes constrained?	☐	☐	☐

Your answers reach beyond engineering. They affect subscriber trust, advertising value, rights-holder confidence, customer support volume, and the economics of premium streaming.

When multiple live events create multiple demand spikes in a single day, delivery strategy becomes a board-level concern.

■ QUICK CHECK

Where you may be falling short

Before the next major event window, content providers can pressure-test the current stack with a few simple tests.

The risk is highest when the delivery plan looks diversified on paper while still depending on the same assumptions underneath. Red flags include:

RED FLAG #1

Your multi-CDN strategy is organized mainly around price, coverage, and failover.

RED FLAG #2

No partner can show what is happening inside ISP networks during the event window.

RED FLAG #3

Capacity planning assumes one peak at a time, even as live calendars create overlapping surges.

RED FLAG #4

Operational teams learn about degradation from complaints before the delivery path adapts.

■ CONCLUSION

For content providers, delivery has become a competitive capability

Live sports exposed the limits of infrastructure built for a calmer traffic era. The industry was still preparing for a world of nightly spikes when the reality accelerated again into repeated peaks across the day, shaped by overlapping events, global audiences, and rising quality expectations.

The platforms that thrive will **give delivery the same strategic attention they give rights, packaging, and audience growth**. You can start today by partnering with modern CDNs, asking sharper questions, and shoring up multi-CDN strategy around differentiated capabilities rather than interchangeable capacity.





■ ABOUT NETSKRT

Netskrt enables streaming delivery for large, complex content experiences, including premium live sports, major content drops, and high-demand video-on-demand.

Its CDN is built around dynamically instantiated capacity, global reach, and last-mile awareness to improve quality of experience while supporting better economics across the streaming value chain.

netskrt.io

Netskrt, your CDN for modern streaming delivery.