

RILINK – The Intelligent Live Broadcast Alternative to Satellite Links

Riedel's RiLink is the new way to connect broadcast live signals from remote event locations to the studio or to connect foreign studios with their home facility. Based on Riedel's own global backbone, the RiLink Global Fiber Service transports more than just the HD/SD-SDI video signals that would be furnished by satellite links in a conventional production. It also provides additional features such as voice communication and internet access which significantly reduce complexity, costs for planning and operating costs of remote event productions.

Features:

Bi-directional

The RiLink links are always bi-directional, providing further flexibility and the ability for return video feeds, digital archive access and full-duplex communication.

Faster

RiLink's latency is significantly shorter than any satellite link.

Flat rate

RiLink is charged at a flat rate for the complete duration of an event. This allows for precision budget planning and more live pre and post-event features or news reports at no extra costs.

High-quality

RiLink's high bandwidth allows for better video quality than satellite links.

Everywhere

RiLink is available everywhere on the planet, no matter if the production is in Beijing, downtown Manhattan or in the middle of Monument Valley.

Versatile

RiLink is the ideal solution for both temporary and permanent installations.

Added value

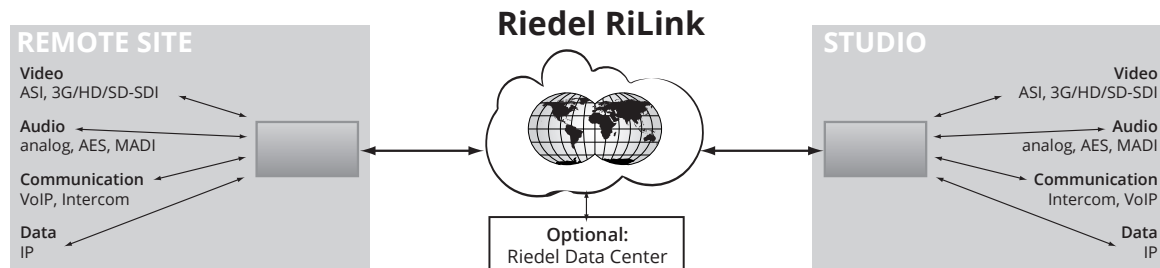
RiLink provides more than just global video contribution: RiLink transports several video signals at once (point-to-point and point-to-multipoint) and also includes integrated connectivity for multi-channel full-duplex voice communication (Intercom, VoIP telephony), multi-channel audio and secure transport of IP-data (VPN, Internet). Since RiLink's guaranteed bandwidth can be allocated dynamically, non-broadcast time could be used for other applications, for example high-bandwidth file transfers.

Reliable

The RiLink global fiber service is completely unaffected by weather conditions that might impact SNG applications. Furthermore, RiLink includes multi-level redundancy within the complete signal transport chain, providing maximum reliability and quality of service (QoS).

Full Service

Riedel's RiLink is a full service end-to-end solution: You choose the locations and signals you'd like to transport and Riedel provides you a plug-&-play RiLink solution. In addition, Riedel can also provide optional services like on-site fiber signal transport, venue cabling and on-site wireless transport of video & audio signals.



Formats:

Riedel RiLink is a global multi-format signal transport solution supporting the following signals:

- Video: ASI, 3G-/HD-/SD-SDI (H.264, MPEG2, JPEG2000 / 4:2:0, 4:2:2 / 10 bit video resolution)
- Audio: analog, AES3/EBU, MADI
- Communication: VoIP, Artist, TETRA-over-IP
- Data: TCP/IP, UDP, etc.

Comparison

	RiLink	Satellite Link
Bi-directional video	Yes	Only via 2nd link
Independent from weather conditions	Yes	No
Latency (e.g. within Europe)*	approx. 30 ms	approx. 300 ms
Transmission	Always (24h/day)	booked time-slots
Payment terms	Flat-rate	Every minute
Transportation costs	Shipment of a flightcase	Shipment & travel expenses for SNG and crew
Added Value	<ul style="list-style-type: none"> • multi-channel full-duplex voice communications (Intercom, VoIP telephony) • multi-channel audio • secure transport of IP-data (VPN, Internet) • high-bandwidth file transfer (e.g. for digital archives) 	n/a

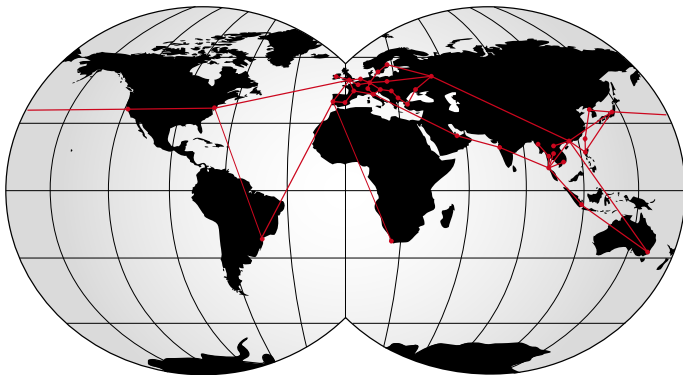
* provider edge to provider edge (not incl. FEC, Format Converter, Coding and De-Coding)

How to get a quote for your application?

Please contact your Riedel sales manager or send the following information to rilink@riedel.net:

- Addresses of the locations
- Starting time and duration of the event
- Quantities & formats of video signals
- Compressed or native signal transport
- Quantities & formats of audio signals
- Quantities & formats of intercom signals
- Desired bandwidth and type of IP services

Riedel's Global Fiber Network



How does RiLink work?

Riedel's global fiber service is based on a dedicated, global MPLS backbone, owned and operated by Riedel Networks GmbH & Co. KG. The network has a meshed structure and provides the foundation for global Multi Protocol Label Switching (MPLS) based connectivity, providing maximum reliability and minimum latency. Unlike solutions realized using the Internet, the Riedel global fiber service provides a secure and fully transparent end-to-end solution with dedicated connections.

QoS mechanisms throughout the entire backbone meet maximum requirements with regards to transmission quality (latency, bit error rate, jitter), reliability (guaranteed bandwidth, redundancy), security, availability and delivery time.

Moving event locations

- RTL@F1, transmission of live HD 1080i signal on H.264 from every race track to Cologne broadcast station with embedded audio channels plus data service, including off-peak usage in case of no video signal transmission
- ORF@F1, transmission of live HD 1080i signal on H.264 from alle European and selected oversea race tracks to Vienna broadcast station with embedded audio channels plus data service, including off-peak usage in case of no video signal transmission
- BP Satellite@F1, transmission of 2x live SD 720p signals for MTV3 and Viasat from every race track to Wijchen plus Internet Access
- NOS@Olympic Winter Games 2014 in Sochi, transmission of 2x live HD 1080i signals on H.264 from Sochi MCR to Hilversum broadcast station with 16x audio channels embedded plus 400M data service for file transfers
- ESPN@X-Games Tignes 2013, transmission of three primary live feeds (world feeds, english, non-english and non-sponsor) and two additional camera feeds for the on-site studio show from Tignes (in the Alps) in France to ESPN IBC in Bristol plus data service in parallel

Long term contracts

- ARD@Cairo, connecting their Egyptian foreign office of ARD to its Stuttgart broadcast station via MPLS for live HD 1080i signal transmission and for file transfer during off-peak usage
- RTL@NewYork, connecting their US foreign office of RTL group to Cologne broadcast station via Ethernet for live HD 1080i signal transmission and for file transfer during off-peak usage
- RussiaToday@Berlin, connecting their German foreign office of Russia Today to Moscow broadcast station via MPLS for live HD 1080i signal transmission and for file transfer during off-peak usage

References (selected)



Customer: NOS (Netherlands)
Project: Winter Games 2014 in Sochi
Task: Transmit live broadcast signal to Hilversum broadcast station



Customer: ARD (Germany)
Project: Egyptian foreign office at Cairo (since 2013)
Task: Connect ARD's Cairo office to its Stuttgart broadcast station via MPLS



Customer: RussiaToday
Project: German foreign office at Berlin (since 2013)
Task: Connect RussiaToday's office to its Moscow broadcast station via MPLS



Customer: RTL (Germany)
Project: Formula One Season (since 2011)
Task: Transmit live broadcast signal from every racetrack, provide archive access & intercom connectivity to main facility in Cologne (Germany)