



# Building Low Latency Video Transport Connection Red Media Success Story

*“PacketLight solutions answered our needs in full, and more”*

*- Vasily Lvov, Deputy Technical Director, Red Media*

## AT A GLANCE

**Company:** Red Media

**Location:** Russia

**Industry:** Content TV

### **Challenge:**

Transmit 30 video channels over a distance of 10 kilometers, with low latency and facility protection.

### **Solution:**

PacketLight's 20G OTN ADM muxponder was deployed. The device aggregates multiple video services into one uplink, and uses a second uplink for protection, with no degradation in transmission quality.

### **Success:**

The link build was successful, adhering to low latency and facility protection requirements, and providing full remote monitoring capabilities.

## Background

Red Media is one of the largest Russian content TV players, specializing in the production and distribution of special-interest television channels that are accessible through cable and satellite operators. Red Media's channels broadcast throughout Russia, the Commonwealth of Independent States (CIS), and the Baltic states.

## The Challenge

Red Media's challenge was to transmit 30 HD-SDI video channels over a distance of 10 kilometers, over fiber optics. Facility protection was necessary and, given that this is a broadcast network, low latency was vital.

## The Solution

PacketLight's PL-2000 20G OTN ADM Muxponder was deployed to build this link, as it efficiently aggregates multiple protocols and rates into dual 10G uplink trunks. In this case, the muxponder aggregates native video streams over DWDM and OTN infrastructure.

In this point-to-point network, the PL-2000 aggregates the services into a single 10G OTU2 uplink pipe with a second 10G OTU2 uplink pipe providing full uplink and fiber protection.

This spectrally efficient transport solution is uncompressed, so there is no degradation in the video channel quality while multiple HD-SDI channels transmit on a single wavelength. As compression creates high latency, this uncompressed solution means the signal passes transparently and latency is very low.

## Success

PacketLight successfully built Red Media's link while adhering to the project's requirements of low latency and facility protection with less than 50ms switching time in case of fiber disruption or cut.

In addition to this, the solution provided redundancy and full remote monitoring using a dedicated optical supervisory channel (OSC)

Vasily Lvov, Deputy Technical Director, Red Media:  
"The solutions deployed by PacketLight Networks enable us to transmit 30 HD-SDI video channels over a distance of 10 kilometers. The solutions includes facility protection and low latency, vital to our broadcast industry. In addition, the signal is uncompressed, adding to the excellent quality of broadcast we are able to offer our customers. PacketLight solutions answered our needs in full, and more."