

DELIVERING UNBEATABLE TV  
Problem. **Solved.**





## Delivering Unbeatable TV

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Consumers expect TV services to be built around them, with intuitive access to compelling entertainment that can be watched on any device and with versatile recording and control features.

Service providers must meet these expectations against the backdrop of competitive markets where costs and margins are squeezed. With this in mind, forward-thinking providers are using new technology to provide the best entertainment in more affordable ways. One such company is an Eastern European service provider. It set out to move ahead of a bigger incumbent player in its market by creating an ambitious TV offering – with the goal of building this using new, lower-cost technology.

Following a competitive tender, the ARRIS Global Services team was selected to deliver the project. This decision was based on its transcoding expertise, project management skills and intimate understanding of complete video delivery systems – from the core to the network to the premise. The pioneering project presented challenging problems.

## BENEFITS

An unbeatable next generation TV package

Opportunity to grow revenue and attract and retain subscribers

Advanced yet low-cost Network DVR

A versatile, future-proof IP platform

*"Our vision to deliver an unbeatable TV service was ambitious, as were the project's deadlines, budget and technical requirements. ARRIS Global Services delivered. It took full responsibility to design and implement a custom TV service that could work within our complex infrastructure while acting as prime contractor managing all third parties. Not only did ARRIS recommend a flexible network-based solution – ahead of its own hardware – but its team went above and beyond to deliver this project to demanding requirements. This smart over-the-top video solution gives us a major performance edge in a competitive market allowing us to package eye-catching products, at competitive prices, that will attract and retain customers."*

-Leading Eastern European service provider

## **The Problem:** Deliver New TV Services Across a Complex Legacy Mix of Network Technologies as Cost-efficiently as Possible

A key issue faced by the project was its primary goal: to offer subscribers an unbeatable TV package. This meant that they could watch most of TV show across most of the channels shown over the previous week; record any number of channels simultaneously; and access recorded content. The

service also needed to offer rich control capabilities – including pausing live TV, recording and time-shifting/catch-up.

From a technical viewpoint, this is a bold vision. For instance, it requires a huge amount of storage – either locally or remotely. What’s more, demanding expectations were set around time and budget, and the stipulation that there should be zero service interruption was measured by unfor-giving function, stress and performance tests.

The requirements meant that much of the existing infrastructure should be reused. However, as is common in many networks, the service provider’s eco-system had grown over time. It comprised a complex web of customer premises equipment, core and network technologies. To meet the budget expectations, smart ways were needed to graft advanced video capabilities into this environment. In effect, to deliver the project, ARRIS had to build a customised over-the-top video solution in partnership with a range of third party vendors.

### **ARRIS Solution: A Feature-Rich and Customised Video Platform**

As prime contractor, ARRIS delivered the project in three steps.

*“ARRIS prides itself on putting the customer first. We saw this most clearly in our project when it dropped its own set-top boxes in favour of a network-based storage solution as this was more appropriate from a cost and technical perspective for our business.”*

-Leading Eastern European service provider

First was the discovery and recommend phase. This involved in-depth consultancy, reviewing what was in place, scoping what was needed to deliver the new services, creating a responsibility matrix and planning multiple interaction and integration points with the third parties. By far, the most time was invested here to clearly map subsequent phases and ensure a smooth progression through the project.

Second, the design and implementation phase involved agreeing all commercial terms and conditions with third parties, overseeing the development of new software and undertaking a programme of network infrastructure and integration changes. These included working closely with the set-top-box provider to create an enhanced interface; developing a subscriber portal to access recordings; deploying large-scale network-based storage; developing a scheduling and playout system for the recording process; and integration with authentication, DRM, billing and content delivery systems. ARRIS built the solution using open IP standards. The thinking here was to make it easier to enhance (or replace) any element in the future and make it possible to roll out services on the provider’s cable, DSL or fibre assets.



In the third phase, ARRIS oversaw the system's implementation. This involved an exhaustive period of acceptance testing – which lasted several months – with preliminary testing on a replica environment and acceptance testing on the network during maintenance windows. The lengthy testing period was partly due to the complexity of the system and also the fact that deploying an NDVR – on this scale – was breaking new ground. Moving into the 'go live' period, ARRIS provided extensive training for the customer's technical teams, a high level of support during the launch and real-time network monitoring for several months afterwards.

### **The Result: High Performance Next Generation TV Services**

This next generation TV project is one of the most ambitious of its kind – anywhere. The adaptive bit-rate service is delivered across a versatile IP infrastructure, with huge amounts of network-based storage available on demand with an intuitive interface, overlaid on the existing set-top box, providing new levels of services from catch-up TV to recording and pausing content. Subscribers are offered a small print free service: they have the freedom to record any number of channels and any amount of content simultaneously, (providing the channel's license permits this); they can watch any programme, on any device, from the previous seven days; and all their recorded content is held for six months.

This is a step-change TV service. It was a turnkey solution delivered to stringent key performance indicators and incredibly tight timescales that all but removed project risk for the provider. It puts the provider ahead with an unbeatable TV package.

Just in the first year of operation, the service provider saw a high proportion of its subscriber base select nDVR services, exceeding expectations. User engagement, as measured by the volume of recordings made, is strong showing the potential of the service to create a significant new revenue stream while also indicating that it will help to attract new customers and increase retention. What's more, because the solution was delivered using new and more affordable technology, the provider has the scope to complement its superior services with creative and attractive price bundles – a powerful and proven combination for success.

## ARRIS – Problem. **Solved.**

For more information on how the ARRIS Professional Services team can help you, visit: <http://www.arris.com/services> or contact your account manager or channel partner.