

## Netherlands Kabel Noord Selects Agama Solution for TV Quality Assurance in Cable Head-End

**(LINKÖPING, April 27, 2011) – Agama Technologies, the DTV quality assurance expert, today announces that the Dutch cable operator Kabel Noord has deployed a cutting edge Agama head-end video monitoring solution for its digital cable TV service, all to ensure high level of TV service quality and customer satisfaction.**

The independently owned Dutch cable operator Kabel Noord has, in line with their focus on continuous service quality improvements, chosen Agama Technologies to provide a future proof head-end monitoring solution for its digital cable television service. In a head-end, where services are created and processed, it is essential to monitor all layers of the DTV service; from the physical layer, through the transport stream, and into the audio and video content layers. Issues such as audio silence, black screen, freeze frame, and macroblocking can originate in a stream even before it enters the head-end, but can also be created within head-end equipment and processes. Discovering these problems and their origin requires content level monitoring, as they can't be detected in regular transport stream or deep packet inspection analysis.

*"We see monitoring as a way to bring our customer service to the highest possible level and proactively react on issues. Agama brings a complete monitoring solution that enables us to do an advanced quality check for all digital channels before they leave the head-end,"* says Anton van der Hoek, Head Technical Department, Kabel Noord. *"We do have plans to move to an FttH network with full IPTV. In the future, the Agama monitoring solution can easily be upgraded to do deep monitoring at all fiber locations and actually check the quality all the way to the customers' homes."*

The deployed solution includes the Agama Analyzer H-E, with support for analyzing muxes on multiple RF interfaces and advanced monitoring of MPEG-2 and MPEG-4 AVC streams up to the video content layer. The powerful Analyzer detects audio and video content conditions, but also provides complete syntactic and semantic verification of all levels of the TV service. The real-time monitoring data is handled by an Agama Alarm Server, a solution for efficient alarm generation, enabling SNMP, syslog, and email alarms to be filtered and sent to separate NMS:s.

*"I am pleased that Kabel Noord, after a long and dedicated focus on this area, has chosen our solution to support them in offering first-class service quality to their cable TV customers,"* says Mikael Dahlgren, CEO, Agama Technologies. *"Kabel Noord joins our line-up of both traditional and hybrid cable operator customers, and we are very proud of that yet another modern cable operator opts for Agama when it comes to selecting a trusted partner to ensure their service quality."*

At the upcoming ANGA Cable Show, stand 10.1/T29, Agama will showcase the brand new version 4.0 of the complete Agama DTV Monitoring Solution, with its new features and extensions. In the Agama Analyzer, one exciting enhancement is the high performance Template Based Monitoring functionality, enabling detailed validation of transport stream, service and PID characteristics on a full multi gigabit of transport streams, in addition to the complete TR290 Priority 1, 2 and 3 tests. This makes it the ideal choice in all types of broadcast and cable scenarios.

## Agama Analyzer product family

The Agama Analyzer range – H-E, FLEX, NET and eQAM – provides real-time 24/7 service level monitoring of the delivery chain, monitoring hundreds of simultaneous digital TV streams from head-end to the edge device. Support for all levels of the digital TV service – network, TV stream and the video content itself, right down to pixel level – as well as monitoring of encrypted streams, gives true service assurance. The Analyzer supports multiple metrics for DTV and both SD and HD MPEG-2 and MPEG-4/AVC video. By objectively measuring the perceived user quality through analyzing the whole DTV stack, the Analyzer has proven to accurately judge the impact of any detected error on the viewer experience. In addition, network parameters such as IP packet jitter and packet loss are measured, which are important to be able to understand network Quality of Service (QoS).

## Agama Alarm Server

The Alarm Server is a small-scale solution for central alarm generation based on real-time monitoring data from a limited set of Agama Analyzers. Intended specifically for deployments with an alarm-based workflow, the Alarm Server's functionality is based on the powerful alarm capabilities of the Agama Enterprise Server. Generated alarms are presented in the web-based user interface and sent as SNMP traps, e-mail alerts or syslog events. Key features of the Agama Alarm Server include X.733 severity, event types and probable cause, configurable hold-off functionality, stateful alarm system with access to history of cleared alarms, and an alarm log view with filtering options.

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## About Kabel Noord

Kabel Noord is headquartered in Dokkum, The Netherlands, and serves communities in five counties in the country's northernmost region, Friesland. It offers customer cable TV, voice, video and data as well as serving local businesses with fiber connections. For more information, please visit [www.kabelnoord.nl](http://www.kabelnoord.nl).

## About Agama Technologies

Agama Technologies provides next generation quality assurance and monitoring solutions for digital TV and video services. As the first company to provide complete and proven end-to-end, multi-metric monitoring solutions, Agama continues to pioneer and innovate. Today, more than 60 telcos, broadband operators and TV service providers rely on Agama's solutions to ensure TV service quality and customer satisfaction. Agama Technologies AB is based in Linköping, Sweden, and is privately held. For more information, please visit [www.agama.tv](http://www.agama.tv).