- The efficient creation, discovery and distribution of the service among various Service/Content Providers and Consumers within the same network-ecosystem
- The optimized delivery of the service via enhanced network overlays (VCANs) enhanced with content awareness, traffic differentiation and dynamic on-the-fly adaptation mechanisms, resulting in a dramatic increase of the offered QoS/QoE
- The continuous cross-layer monitoring of the offered service, allowing the Service/Content Provider to control and adapt it in real time.

VI. CONCLUSION

This paper described a novel architecture for deployment of Media Ecosystems within the context of the Future Internet. This architecture, which realizes Content-Aware networking and accommodates for Network-Aware applications, can be applied in any existing provider network in order to enhance it while keeping it backwards compatible (i.e. still able to convey legacy, non-registered services). It is being implemented within the frame of the EU-funded ALICANTE project, which started March 2010 and is planned to run for three years. Currently (February 2011), system definition has been completed and early versions of most modules have been implemented.

The viability and efficiency of the proposed architecture will be investigated in an international demonstrator, including autonomous but cooperating systems/pilots in Aveiro (Portugal), Bucharest (Romania), Bordeaux (France) and Beijing (China), in which both intra-network and inter-network use cases will be investigated and validated. The goal will be to demonstrate the features and added value of the proposed architecture which extends beyond plain technical superiority; it also introduces new aspects in the business sector by including multiple actors under a single platform and by creating in this way new business opportunities which current infrastructures cannot provide.

ACKNOWLEDGMENT

This work is supported by the European research project ALICANTE within the framework of the EU FP7 in ICT, under grant agreement n° 248652. Homepage: http://www.ict-alicante.eu

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