Position Paper

for the second W3C Web and TV Workshop

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I. Who we are

The Media Networks Laboratory is a part of the Institute of Informatics and Telecommunications, NCSR "Demokritos", a W3C member. The laboratory has been active for more than a decade in a number of National and European research projects, following the reputation of the Institute of Informatics and Telecommunication in the global research communities. The research achievements of the laboratory are reflected in a considerable number of publications in journals and conferences.

The research activities of the laboratory are focused on:

- Next Generation, media-oriented network architectures based on technology convergence
- Digital Video Broadcasting platforms (DVB-T/T2, DVB-S/S2, DVB-H) for broadcast and Interactive Services
- Real-time network adaptation and dynamic resource allocation for multimedia provisioning
- End-to-end QoS mechanisms
- Cross-layer management in integrated-services satellite networks based on DVB-S2
- IP Multimedia Subsystem (IMS) and IMS-based management of multimedia services
- Network- and Perceived-Quality of Service analysis and mapping between them

The lab developed the first digital television platform to support fully interactive services in Greece (and one of the first ones in Europe in 2001). More details at http://www.medianetlab.gr

II. Interesting topics/Proposals for Web and TV

In the frame of the "Web and TV" activity and draft charter, we propose (and will contribute to):

- Coordinated activities with the European HbbTV (Hybrid Broadcast Broadband TV) platform for hybrid delivery of Web/TV services over both

broadband and broadcast networks. Transport and scheduling mechanisms suitable for current and future broadcast platforms.

- Elaboration of a common unified service and transport/network platform architecture for provision of Web/TV services regardless of the underlying network nature (broadcast/broadband/mobile)
- Addressing Quality of Experience and elaborating an end-to-end QoE framework for hybrid broadcast Internet/WebTV services, consisting of both media streams and web applications.
- Mechanisms for dynamic, network-aware adaptation of hybrid broadcast Internet and WebTV services for QoS provision.
- Web and TV services in the forthcoming “future Internet” framework

III. Exploitation plan

At Media Networks lab we plan to exploit gained know-how in the Web and TV technologies, in conjunction with our current expertise, in current and future research activities oriented to the provision of rich media services. Commercial exploitation is planned via spin-off companies devoted to development of Web platforms and experimental hardware prototypes.