Open IPTV Forum Overview
for IEC TC100, April 2011

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The IPTV Standardization Issue...

- IPTV requires multiple standards in multiple disciplines
  - Most already exist
  - Many have multiple options or local extensions
- Today’s solutions also include proprietary technology
- Integration requirements are severe, leading to
  - Limited interoperability
  - Poor economies of scale
  - Little opportunity for innovative applications
- Result is an IPTV industry which is less effective and less innovative than industry participants would wish

The Open IPTV Forum (OIPF) is working towards a fully scalable and interoperable IPTV solution
Open IPTV Forum Aims

- Facilitate a complete end-to-end open industry standards based IPTV ecosystem for converged multimedia services to the consumer
- Address both Managed Network and Open Internet IPTV business models, while maintaining a single UNI towards the home environment
- Welcome all key stakeholders across the IPTV ecosystem into the Forum
- Embrace existing or ongoing standardization activities by other SDOs and fora
- Add value for IPTV consumers – push and on-demand media delivery complemented by interactive applications and blended communication services
- Go beyond specification development; also progress with work on Interoperability and Certification for the industry
# OIPF Members

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OIPF – Connecting TV to the Future

- Global organization representing key stakeholder groups in IPTV:
  - Service providers
  - CE/Home/Mobile device providers
  - Network Infrastructure providers
  - Content & Service providers
  - Technology providers
- OIPF launched in March 2007
- Inaugurated as Association in Germany, Sept. 2009

- Specifications cover the end-to-end solution:
  - Media delivery (codecs, formats, protocols)
  - Session management (setup, resource management, stream control)
  - Asset Management (service discovery and content metadata)
  - Service Logic & Interactivity (browser & procedural application environments)
  - Service and Content Protection (fully specified end-to-end solution)
OIPF – Connecting TV to the Future

• **Best industry practice, driven from the following perspectives**
  • Requirements definition
  • Architecture and Solution specifications
  • Definition of market-relevant Profiles

• **Go-to-market activities complement specification development:**
  • Interoperability testing
  • Certification programs
  • Pilot deployments
OIPF Standards Landscape

REFER to

CO-OPERATE/LIAISE with
OIPF Main Referenced Standards

Volume 2
Media Formats

Volume 3
Content Metadata

Volume 4
Protocols

Volume 5
Declarative Application Environment

Volume 6
Procedural Application Environment

Volume 7
Authentication, Content Protection & Service Protection

OIPF provides end-to-end specifications for IPTV!
OIPF IPTV Solution Scope

Managed Network

Open IPTV Common UNI

Access Provider → Service Platform Provider → IPTV Provider

3rd Party Content Provider

Open Internet

Access Provider → Service Platform Provider → IPTV Provider

CGM (Consumer Generated Media)

* Triple play Walled Garden

* Portal site Walled Garden

Same UNI for Managed Network and Open Internet

SLA = Service Level Agreement

UNI = User Network Interface
Residential Network Architecture

ITF = IPTV Terminal Function

OITF = Open Internet Terminal Function

Application Gateway Functional Entity (AG)
IMS Gateway Functional Entity (IG)
CSP Gateway Functional Entity (CG)
WAN Gateway Functional Entity
Application Ecosystem

- **Declarative Application Environment**
  - CE-HTML & JavaScript APIs
  - HTML5 video object
- **Procedural Application Environment**
  - DVB GEM-IPTV
### Release 1 Features

#### General
- Service access on TVs/STBs via fixed networks

#### Scheduled content services
- SD and HD TV
- Audio only services
- Electronic Program Guide
- Teletext
- Subscription and Pay-per-View
- Hybrid services / TV via Broadcast channels

#### Recording services
- Local and Network PVR
- Series recording
- Local Time Shift TV

#### On-demand services
- SD and HD video
- Audio only services
- VoD catalogue
- Subscription and pay-per-view
- Streaming and download services
Release 1 Features

User Interface / Portal
- Web Access
- Information Services
- Interactive Applications
- Broadcast reminders
- Emergency Alerts

User and Service Management
- Single user and family accounts
- User self care / profile management
- Parental control
- Terminal remote management
- Platform provider support

Communication services interworking
- Instant messaging and chatting
- Presence / What I am watching
- Incoming call Pop Up

Others
- Advertising
- Sharing of content in the home network

OIPF – Release 2 Specifications

- Release 2 evolves Release 1 functionality in many areas
- Specific areas of major functional enhancement include:
  - Enhanced multicast, recording and on-demand services with enhanced video features e.g. PiP and fast channel change
  - Adaptive Streaming
  - Hybrid (Broadcast-Broadband) application support
  - Voice and Video Communications Services
  - Enhanced Notification services
  - Session Continuity between devices
- Release 2 specifications published Sept. 2010
- V2.1 revision currently in pre-publication internal review
- Post-Release 2 developments based on “Feature Packages” that augment the core Release 2 platform specifications
OIPF IPTV Solution Profiles

- Profiles driven by market needs
  - Supports different business models
  - Specifies the mandatory features for each profile
  - Basis for interoperability and certification
- Three defined profiles
  - **Open Internet Profile**
    - Addressing basic capabilities to support Open Internet services
  - **Baseline Managed Profile**
    - Addressing key capabilities to support a common profile for Open Internet and Managed Network services
  - **Enhanced Managed Profile**
    - Addressing full set of capabilities to support a common profile for Open Internet & Managed Network services
- Release 2 Profiles specification nearing completion
Interoperability, Certification, Pilots

- OIPF members-only InteroPTV events held Nov. 2009, June 2010 and Nov. 2010
- Demonstrations at industry events e.g. IBC, IPTV World Forum
- OIPF participation in pilot trials
- OIPF Release 1 certification programme planned during 2011

OIPF is stimulating an open and transparent IPTV market