



**International Telecommunication Union**

# **IMS enabling interactive IPTV services**

**Gianluca D'Errico**

**Project Manager in the Service Layer  
Innovation of Telecom Italia**

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## IMS enabling interactive IPTV Services

- o An interactive IPTV service concept
- o The enabling functionalities
- o Discussion about architecture
- o The hot topics TI is investigating
- o Conclusions
- o Question and answers



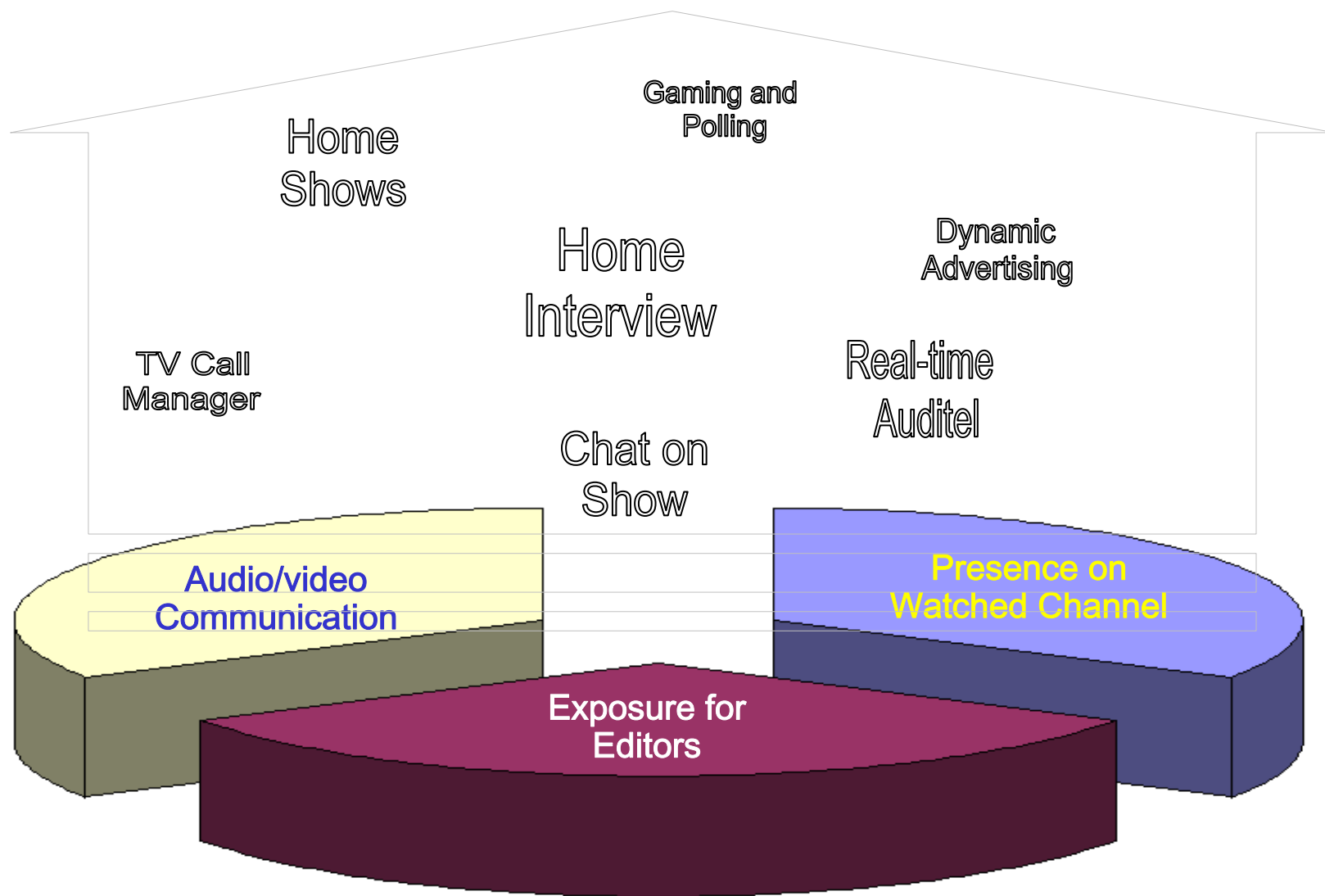
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## An interactive IPTV service concept

My picture is now on the TV... all spectators can see the video coming from my house... and I can talk with the cameramen and with the champion... let's start my **PERSONAL INTERVIEW**... What an unforgettable race !!



# Enabling functionalities





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## Enabling functionalities - details

Comm/IPTV  
Integration

- Audio/Video communication
  - bringing communication as close as possible to the TV-set (user perspective)
- Presence on watched channel
  - adding the watched channel in the RPID, and using it with the other presence attributes.

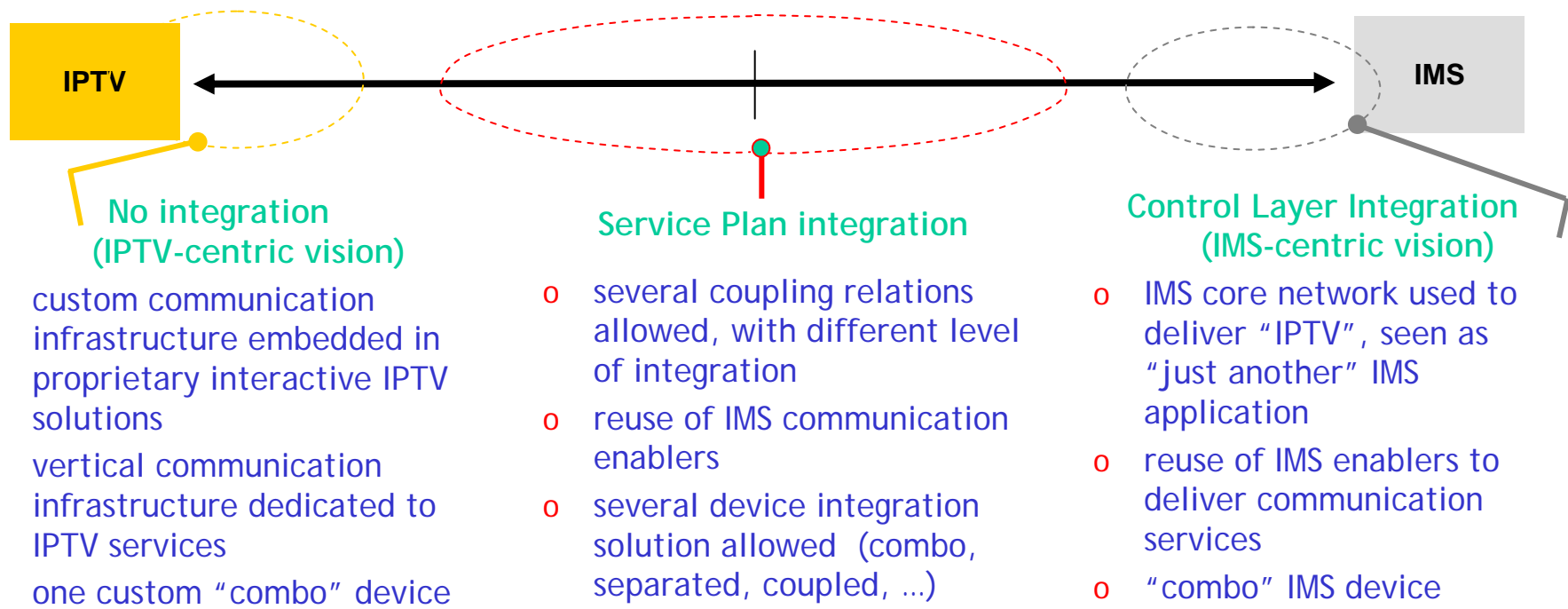
Service Layer  
Architecture

- Exposure for editors
  - creating a flexible infrastructure to enable new TV formats offered together with other players (content and service providers).



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## Architecture: Comm/IPTV integration



The integration should follow the following priorities

- **Market** (increasing value on IPTV services)
- **Architecture** (re-using legacy as much as possible)



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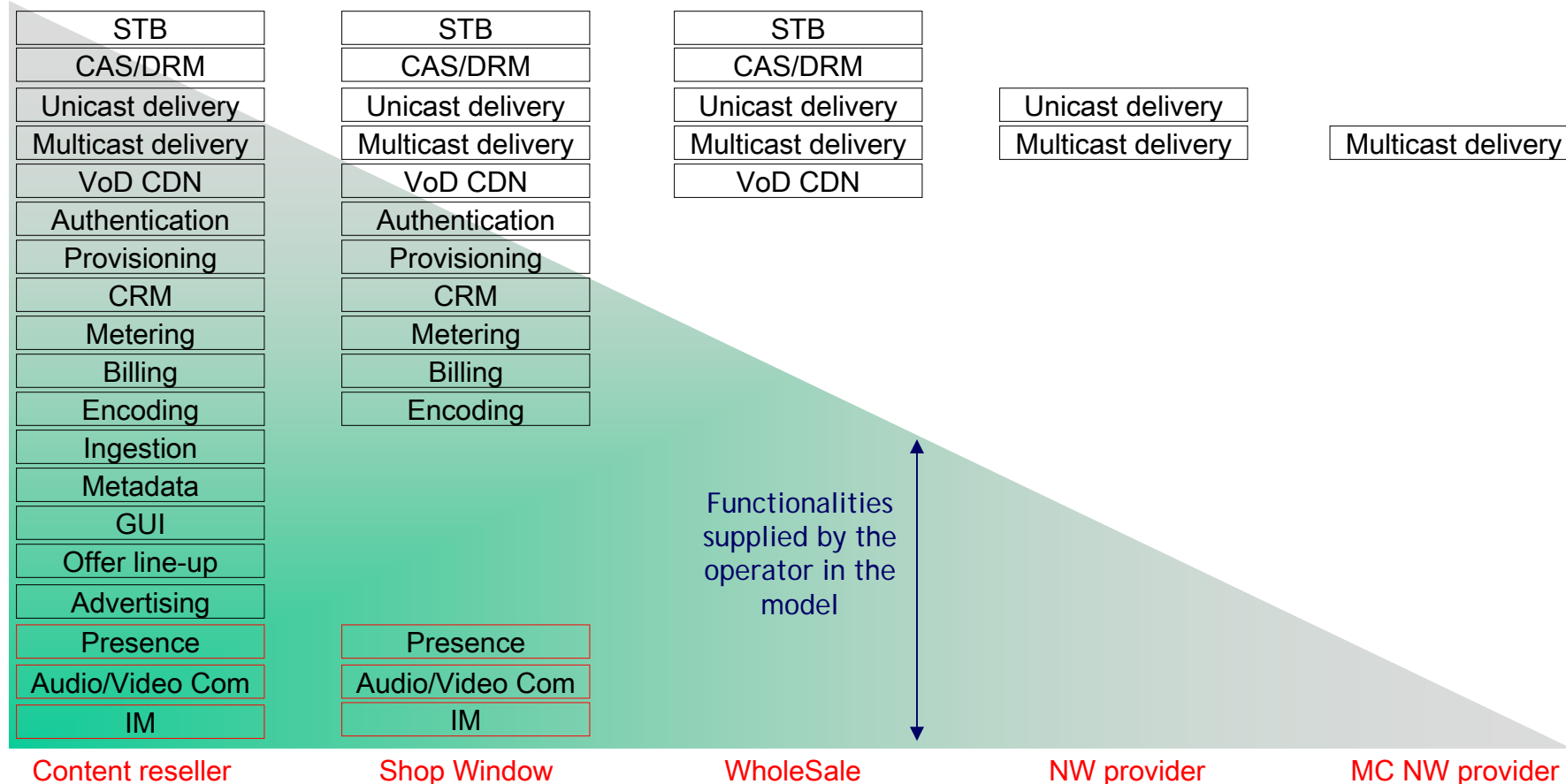
# Architecture: IMS/IPTV integration

	Network integration	Client Integration	Enabled scenarios
<b>Complexity (time?)</b>	Integration of IMS enablers (service layer level)	No integration	<ul style="list-style-type: none"> <li>Services based on watched-channel Presence (real-time auditel, prize games on watched channels, building od temporary buddy lists based on watched channel and other RPID attributes)</li> <li>3° party calls started by IPTV apps (e.g. MHP)</li> <li>No use of IMS for security, AAA, and charging, Qos</li> </ul>
	Integration of IMS enablers (service layer level)	Slightly integrated IMS and IPTV clients	<ul style="list-style-type: none"> <li>Services based on watched-channel Presence (see above)</li> <li>Sharing of the TV display for IMS applications (e.g. IM client, incoming call manager, etc.)</li> <li>No use of IMS for security, AAA, and charging, Qos</li> </ul>
	Integration on both service and control layer	Tightly integrated IMS and IPTV client	<ul style="list-style-type: none"> <li>Services based on watched-channel Presence (see above)</li> <li>Full integration of IPTV and communication features (audio/video calls, IM, etc.)</li> <li>Use of IMS for security, AAA, charging, Qos</li> </ul>



# Architecture: Flexible Exposure and business models

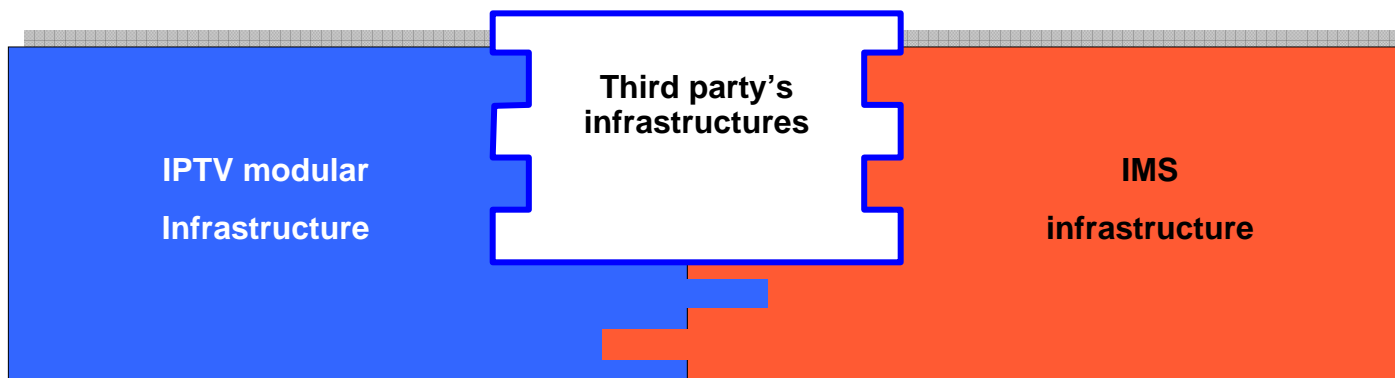
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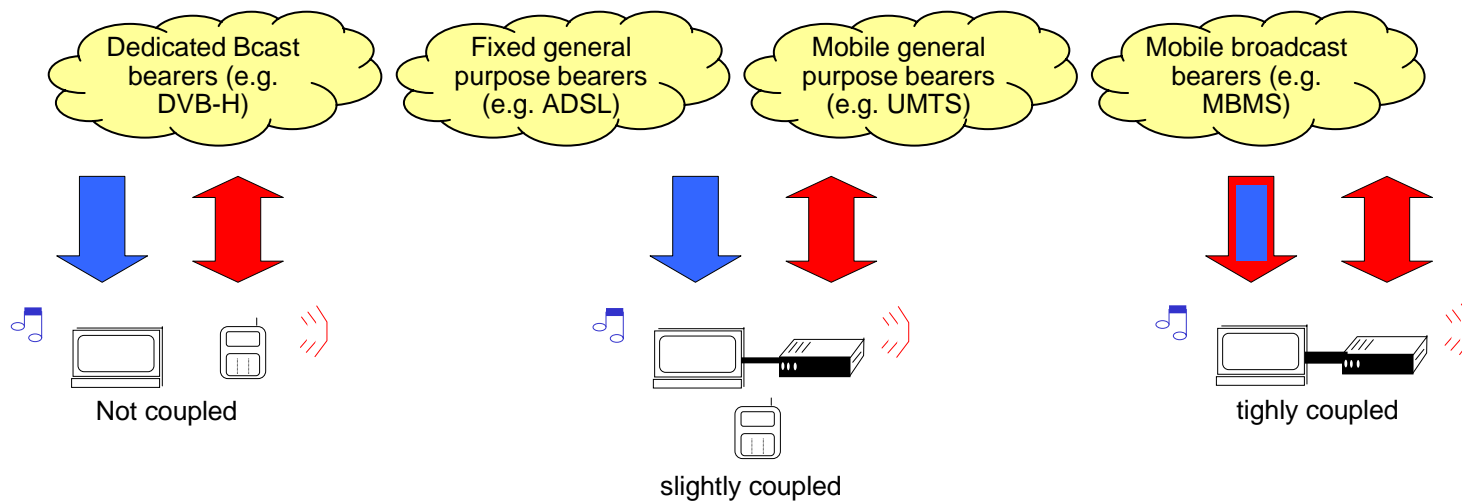
A modular composition (SOA) of the functionalities/enablers allows multi-model approach in 3<sup>o</sup> party integration



# Architecture: The target schema



## Access Networks



## Complexity (deployment time)



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## Hot topics

- o Interactive TV formats
- o Identity management in the home
- o IMS/IPTV integration (step-by-step)
- o CE vision and business models
- o SL SOA architecture (modularization of infrastructure)



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## Conclusions

- o IMS is the right technology in order to PUSH interactivity on IPTV services, but the focus must be set on market requirements and legacy rationalization.
- o The architecture, in order to allow flexibility on business models, must be designed to be open, but controlled, to third parties.

# Q&A