

Broadband Content Becomes Part of French Production

New European Broadband

*More than just an after-thought, Internet narrowcast is growing up:
Data pipes and customer expectations are widening.*

By Howard Greenfield

The movement from broadcast programming to broadband content increasingly affects the Telecom, Media and ICT worlds. This is being driven by new tools and technologies as well as the economics—and sometimes it's hard to tell which is in charge. In France, these sectors are not skipping a beat in the gradual mass migration to broadband video. One example is the announcement by leading telecom supplier Alcatel, one of France's largest industrial companies, of a blockbuster IPTV partnership with Microsoft.

What is the significance of such alliances? Is the future of Broadcast operations in the balance, or is this a mere re-shuffling of the same ownership? Time reveals all, but there is more going on in France and the rest of Europe than meets the eye. Services and pricing are changing along with consumer buying habits and surges in new subscription growth. More services, cheaper prices, and converging delivery models are in store.

Question: Phone + Internet + Video [+ Wireless] = What? Call it grand-slam, triple-play—some call it four-play when you include wireless—the trend is clear: broadband and digital TV penetration will reach around 40% by 2008, and Telcos will begin offering more video over fiber and copper. As Yankee Group analysts point out, competition between Telcos and cable operators will begin to blur as both seek to become a comprehensive provider of voice, video, and data (and wireless). Telcos are entering the TV business: in France, Ma Ligne offers free to air channels, Canal, and TPS over the Web through DSL. Hard to say where will it stop as we look at the industry analysis:

- **IPTV GROWTH.** Providers of IPTV, such as France's Free and Italy's Fastweb, have boosted their user base by 450,000, and it's projected that European IPTV will grow to 11.3 million subscribers by 2010 (Strategy Analytics, 2005).
- **DTV GROWTH.** Broadband and digital TV in Western Europe will continue steady growth the next few years -- by 2006 Digital TV penetration will reach 28.5%, Broadband 31.6% (Yankee Group, 2005)
- **HOME ADSL TV.** It's been predicted that nearly 1.5 million homes in France will pay for television through high-speed ADSL internet by 2006 (US State Dept, 2004-2005)

Likewise, reviewing France Telecom's 2004 performance is telling: 6.3 M ADSL lines (including 2.9 M for Wanadoo ISP), 63 M wireless customers, and approaching 100,000 MaLigne TV-over-DSL customers. There is a cross-over of disciplines and markets occurring: telecoms are providing video access, Cable companies are offering Internet access, and telephone services are being delivered on the Web (VOIP). Likewise, de-regulation of France Telecom in 2004 has opened the commercial playing field. Where is it all leading?

Experts agree.

Many experts inside France see a trend that will force the issue of Telecom, Broadcast, ISP triple-play. "The penetration of DSL lines in France has risen significantly over the past 18 months, and reached 6.1 million lines in December 2004" says Michel Rogy, Associate Director at French research organization World Observatory of Communications Systems (www.omsyc.fr). "In 2004, total DSL lines grew by 90% (+2.9 million). . . Triple play offerings along with aggressive pricing have been key elements of market dynamics. French customers give high value both to TV broadcast and to 'unlimited local and national calls' (VOIP)."

According to Rogy, the key players are the incumbent France Telecom and new market entrants Free and Neuf Telecom who all offer “special ‘boxes’ for their triple play offerings installed at the customer premises.” Regarding the future, says Rogy, “in the next two years, full unbundling . . . is expected to have a strong growth . . . along with the launch in 2005 of digital terrestrial broadcast in France will provide the broadcast industry with yet another massive addition of distribution channels. Some triple play actors have already announced that their boxes will also handle digital terrestrial TV signal, in an attempt to position themselves as the provider of the multi-service domestic gateway.”

Today, video is delivered on the Internet via different players and applications. However, it chiefly comes in two flavors: Internet video, and dedicated broadband video. Internet video provides video streams in conjunction with other HTML website content such as broadband-television.com, and broadcast-live.com/television/french.html. Dedicated broadband video uses pipes or backbone exclusively for broadcast quality television service delivery. “All the big broadcasters such as France Television, M6, and TF1 are reacting to this front with an aggressive approach including news programs and smaller clips, and some broadcast” says Etienne Grange, CEO of Paris-based NPTV.

Free.fr has been the pioneer in recently putting TV over ADSL. Though not yet a large, viable market, “they lead with around 700 thousand ADSL subscribers. Their Freebox all-in-one ADSL USB modem includes a telephone plug for free phone service throughout France.” This box, advertised at 20 Mbit/s speeds provides services for 30 Euro/month. “France Telecom is also now pushing IPTV. It’s interesting that times have changed. France Telecom in the past was a monopoly at the center of all these emerging technologies and services, but companies can now go around FT’s de-regulation in 2004” says Grange.

Triple Tech Talk

To understand these trends, let’s examine the drivers. “France is a good indicator of where the market is going to go in general” says OpenTV CTO, Vincent Dureau. “In France there are two pay TV bouquets TPS (owned by TF1 and M6) and Canal Plus – distributed on satellite and cable. “ As Dureau puts it, the satellite market hasn’t had luck with DTH (direct to home) in the large French cities, so in seeking better distribution in urban areas they look to cable. They have looked to telecom providers to re-sell content as the majority of those living in cities can get DSL at 5Mbs – which is a significant IPTV enabler.”

Speaking in more detail about the two types of IP video, Dureau says “there are two markets: one is embryonic, TV content through internet to PC.” However, in his opinion, the TV audience is limited because quality of service, the video experience, is poor. “When we take DSL through the Internet—even at 5M/bits/s between the edge of network and the home—there are multiple hops between routers and so forth, typically yielding low quality”. This might suffice for some short newscast on demand, or BBC catch-up channels, but not for live broadcast. “What’s more” he adds “there are rights issues to consider—but regardless, it’s a marginal market, I think. The second offering is live content through a set top box via a dedicated backbone that goes direct to the network. Telecom operators are building these backbones” says Dureau.

Then there’s the “R” word in DRM, Digital Rights Management. What experience do broadband video providers have with original content? Is it licensed from third parties? Do they have the right to distribute over IPTV? As Dureau asks: “When the contracts were negotiated, they probably were not thinking about downloading or streaming options. So, the question remains: do they have rights? Likewise, can they transmit the programming content ‘in the clear’ or does it need to be encrypted? Now that the audience is getting bigger—reaching hundreds of thousands—it raises these questions. The answer is that the same constraints that exist for cable and satellite will probably apply.”

“Early IPTV deployments ignored piracy issues and transmitted content in the clear. As they are transitioning from trials to paying customers, Telcos will have to address content protection issues

by deploying DRM technologies that are acceptable to the studios. Tools for facilitating this process and asset management will be needed like those from Lysis, and Nagra's DRM capability for IPTV in particular."

[NOTE: Possible Lysis or Nagra architecture graphic here]

This is an important point: as IPTV goes mainstream, the technology begins to more and more resemble the same conditional access systems and set top boxes (from the likes of Thompson, Pace, etc.) deployed in conventional video broadcast. "In trials, IPTV used to have individual streams; but this didn't scale, so Telcos noticed moving from 100s to 1000s of customers would demand a multicast approach and the same signaling information. For instance, in tuning to TF1, the system needs to process the IP address, DVB signaling format, etc. So, telecom networks will behave like two-way cable, the same technology, products and vendors."

"As far as current innovation and execution, the case studies for PC delivery in France are limited—not very user-friendly such as <http://guidemedia.club-internet.fr>. But offerings in broadcast channels to TV through DSL—such as Wanadoo's (<http://www.malignetv.fr/>)—have a growing audience around the 100,000 paying subscriber mark, and good content offerings, including Canal, TPS, and all the free to air channels, including TF1). They have had to solve a lot of the scalability issues that have plagued early IPTV deployments."

Industry Drivers

It's tough trying to read the waters on where the industry will be even a year from now. Likewise, it's hard to predict who will build the winning triple-play customer base. Telco's, ISPs, and TV service providers' respective strengths in communications, network access, and entertainment, become increasingly blurred. However, it's clear there is a growing correlation between the falling costs of broadband, storage, and PC, and rising adoption and appetite for video content.

"The trend is in constant evolution—TV on broadband is a very new distribution network" says TPS' Stephane Merires, Vice President, Technology & IT. "In fact, we believe that Broadcast TV on broadband network—not through Internet—will win the battle; that is: high speed internet, voice, and TV through the same phone line. And with the new players in France like Free and 9telecom, the subscription costs are going down quickly. TF1's president Patrick Lelay has said that in five years, 50% of TV sets will receive TV through phone lines."

Merires observes there will be other challenges such as the rapid implementation of MPEG4 - AVC compression systems to enable HDTV on all distribution networks. "In particular, the broadband launch of HDTV this year will be a big advantage for TPS/TF1 versus Canal +." he says, adding that other important trends will include TV on mobile. "TPS with TF1, Orange, and Bouygues Telecom will implement experimental trials in real conditions with 200 to 400 end users during 2005".

Future in the balance

It is the innovators with the most genius and timing—or simply the most heft—that pioneer where the general industry and public follow. What then, is the significance of ventures like Alcatel and Microsoft IPTV? These giants are not the only two gorillas cooking up a new combination of services. Whereas early customer interest may be for short clips—news, weather, movie trailers, etc.—as quality and customer demand grow for full-length features, and quality of service will likely equalize on copper, fibre, satellite, or wireless.

Many in the industry agree we are starting to see new, different channels in Europe--some more successful than others. It's an undecided battle that eventually change the market dynamic with additional avenues for getting video and content to consumers. "A lot is at stake" says Yankee Group media and entertainment analyst, Aditya Kishore. "TV is a huge industry—you're talking about billions of Euros spent in advertising, which alone is a substantial amount of money that everyone is fighting for. However, the bigger issue is triple play: the combination of television,

internet access, and phone service—perhaps even the wireless component.” As Kishore explains: “we could be looking at 50-60 € per subscriber—perhaps more, 100 € for the combination of all those services. So, there’s a lot of money at stake because video will anchor the triple play.”

Amidst so much change, we encounter developments driving great change, along with those that are simply red herrings. For instance, traditional voice telephone will probably become a declining market while wireless becomes more prevalent. The impact? The wonder of cross-selling: whereas, a consumer’s first home or apartment phone system of choice might have once been wire line, for many, mobile is now primary. Therefore, the first call may be through the wireless provider for pay TV—a good chance to also sell the consumer voice, and Internet access.

Kishore explains: “if you call up for Internet access and your Internet Service Provider can sign you up for television, that allows for an up-selling opportunity eventually. The moment you make that first call – there’s an opportunity to sell you something. There’s a pretty significant multi-service opportunity here regardless of whether it’s the phone company or the cable company or whoever, there’s an opportunity to sort of cement the customer.”

This varies from country to country and that there is a tendency to make generalized statements about Europe when it’s tougher and tougher to do because of differing regulatory and infrastructure issues. Nonetheless, this change is somehow turning the destiny of Broadcast-based video and Telco/ISP-based video full circle. Kishore concludes: “Over time, phone companies must develop a more robust bundle primarily not driven by voice, because wireless becomes more significant. And video becomes a more prominent service.”

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Howard Greenfield brings over 20 years of writing, technology, and business expertise to various publication audiences. Howard has held senior executive positions with world leaders such as Sun Microsystems, Informix Software, Apple Computer, British Telecom (BT), Europe Online, and others. Howard has a passion for the influence of technology on culture and global business practices.

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