6 Internet Advertising and Access Spending

Being seen in a worldwide shopping mall

Summary

The Internet market consists of spending by consumers to access the Internet and spending by advertisers. Internet wired and mobile access consists of fees paid by consumers to Internet service providers (ISPs) and to wireless carriers for Internet access via mobile devices, whether provided as a stand-alone service or as part of a bundle. Internet advertising consists of spending by online advertisers on display, classified, paid search, video and other online formats; and advertising delivered to mobile phones via text messages, display ads, video ads, local search, and other formats designed for mobile handset screens. The Internet is used for communication, to purchase products, and for other purposes. While consumer use of the Internet for transactions is growing rapidly, we do not include that spending in the Internet totals. Online purchases of entertainment and media (E&M) products such as recorded music or online video games are counted in the Recorded Music and Video Game chapters, respectively, because our focus is on the content that is purchased and not the channel used to purchase it. Online purchases of other products such as airline tickets are not included in this Outlook because it is not E&M content.

The Netherlands has the highest penetration of Internet households in Western Europe at 85 percent in 2007 and the highest broadband penetration with 74 percent of all households connecting to the Internet via broadband. Further growth in the Internet household universe therefore will necessarily be limited, which in turn will limit overall market growth. The overall market expanded by 15.9 percent in 2007, falling below 20 percent growth for the first time in the past five years. We expect an additional year of double-digit growth in 2008 with increases dropping to mid-single-digit levels by the end of the forecast period.

Wired Internet access spending, which rose by 10.4 percent in 2007, will drop to a 4.2 percent compound annual increase during the next five years as Internet household growth slows. Augmenting household access is an emerging mobile access market. A quarter of wireless telephone subscribers use their mobile phones to access the Internet. Wireless carriers are upgrading their networks to accommodate data transmissions and faster download speeds. As new handsets that can access upgraded wireless networks penetrate the market, mobile access will expand. We expect that by 2012, half of all wireless telephone subscribers will access the Internet through their mobile devices. Mobile access spending rose by 42.6 percent in 2007. We project three more years of double-digit growth with increases falling to mid-single-digit rates by 2011–2012. Growth will average 11.8 percent compounded annually during the entire 2008–2012 forecast period.

Total access spending will increase at a 6.0 percent compound annual rate to € 2.9 billion in 2012 from € 2.2 billion in 2007.

High broadband penetration in the Netherlands creates a favorable environment for Internet advertising. Internet advertising tends to follow the broadband household growth because broadband users visit more Web sites, download more content, and buy more products online than dial-up users, making them more attractive to advertisers. Online advertising more than doubled in 2006 and rose by an additional 13.5 percent in 2007. We expect a pickup in growth in 2008 as the broadband universe continues to expand by double-digits, followed by moderating growth as broadband household growth slows. Internet advertising will expand at a 12.9 percent compound annual rate during the next five years.

The rise in mobile Internet access will be accompanied by mobile advertising, a small but rapidly developing component of the market. With half of all wireless telephone subscribers projected to access the Internet through their

mobile devices by 2012, mobile advertising will become an appealing way to reach people. We expect this market to expand at a 38.9 percent compound annual rate from a small base.

Internet advertising as a whole will total an estimated € 1.3 billion in 2012 from € 668 million in 2007, a 14.6 percent compound annual increase.

The overall Internet market will rise to € 4.2 billion by 2012, averaging 8.3 percent growth compounded annually. With the Netherlands having moved ahead of Western Europe in Internet penetration early in the decade, its market will approach saturation sooner than the region as a whole and will grow more slowly. With the rest of the region beginning to catch up with the Netherlands, we expect the Netherlands' share to trend down, falling to 4.2 percent in 2012 from 4.8 percent in 2007.

Internet Access and Advertising: Wired and Mobile (€ Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Access Spending										
Wired										
Dial-Up	653	392	288	197	138	86	61	35	18	13
Broadband	444	884	1,166	1,336	1,555	1,728	1,836	1,921	1,991	2,062
Total Wired Internet Access	1,097	1,276	1,454	1,533	1,693	1,814	1,897	1,956	2,009	2,075
Mobile Access	62	101	172	336	479	583	683	755	802	835
Total Internet and Mobile Access	1,159	1,377	1,626	1,869	2,172	2,397	2,580	2,711	2,811	2,910
Advertising										
Internet Advertising	105	170	250	564	640	765	870	970	1,075	1,175
Mobile Advertising	2	4	8	18	28	40	60	85	115	145
Total Advertising	107	174	258	582	668	805	930	1,055	1,190	1,320
Total Access and Advertising	1,266	1,551	1,884	2,451	2,840	3,202	3,510	3,766	4,001	4,230
Netherlands as a % of Western Europe	5.2	4.9	4.8	4.9	4.8	4.6	4.5	4.3	4.2	4.2

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Internet Access and Advertising Growth: Wired and Mobile (%)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Access Spending											
Wired											
Dial-Up	–10.4	–40.0	–26.5	–31.6	–29.9	–37.7	–29.1	–42.6	–48.6	–27.8	–37.7
Broadband	71.4	99.1	31.9	14.6	16.4	11.1	6.3	4.6	3.6	3.6	5.8
Total Wired Internet Access	11.0	16.3	13.9	5.4	10.4	7.1	4.6	3.1	2.7	3.3	4.2
Mobile Access	—	62.9	70.3	95.3	42.6	21.7	17.2	10.5	6.2	4.1	11.8
Total Internet and Mobile Access	17.3	18.8	18.1	14.9	16.2	10.4	7.6	5.1	3.7	3.5	6.0
Advertising											
Internet Advertising	23.5	61.9	47.1	125.6	13.5	19.5	13.7	11.5	10.8	9.3	12.9
Mobile Advertising	—	100.0	100.0	125.0	55.6	42.9	50.0	41.7	35.3	26.1	38.9
Total Advertising	25.9	62.6	48.3	125.6	14.8	20.5	15.5	13.4	12.8	10.9	14.6
Total Access and Advertising	18.0	22.5	21.5	30.1	15.9	12.7	9.6	7.3	6.2	5.7	8.3

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Internet Access Spending

Wired Access

The Netherlands is the leading territory in Western Europe in both overall Internet household penetration and broadband household penetration. In 2007, 84.9 percent of all households in the Netherlands were online and 74 percent of all households had a broadband Internet connection. For Western Europe as a whole, broadband household penetration averaged 48.2 percent and overall Internet penetration was 62.9 percent. The broadband market in the Netherlands is more competitive than most other countries in Western Europe with cable operators actively competing with telephone companies to offer broadband at attractive prices. Competition and the widespread availability of broadband have facilitated penetration. Strict enforcement of local loop unbundling (LLU) that requires KPN to share its infrastructure with competing carriers has contributed to competition between telephone companies. Digital subscriber line (DSL) is available to 99 percent of the population. The high build-out of cable makes it a strong competitor as well. Cable broadband service is available to 90 percent of the population.

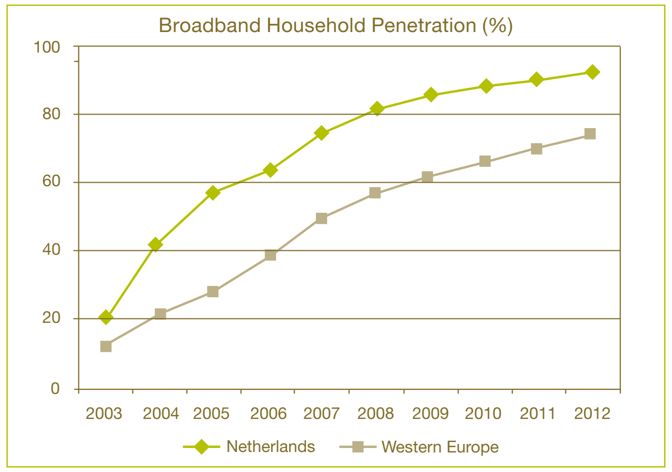
DSL is the dominant access technology accounting for approximately two-thirds of broadband households. KPN, the leading telephone company provider, introduced an Internet protocol television (IPTV) service in 2007, allowing it to add television to their service bundle in a triple play package that combines broadband, telephone and television. Triple play packages will help attract more broadband subscribers. Cable operators have been successful in attracting subscribers with their own triple play offerings. Several years ago they added telephone services to their service bundle through Voice over Internet protocol (VoIP) which operates over a broadband Internet connection. In 2007, approximately 25 percent of Internet users made phone calls using VoIP.

Although KPN has introduced IPTV, it cannot yet provide high definition (HD) channels. This puts it at a disadvantage to cable in the television component of the triple play package. To address this shortcoming, KPN in early 2008 acquired a 41 percent stake in Reggefibre, a fiber optic cable company. Although expensive and time consuming to deploy, fiber will enable KPN to offer HD and will also provide faster broadband speeds.

Cable is also working on enhancing its broadband speeds. In 2008, the Data Over Cable Interface Specification (DOCSIS) 3.0 standard was ratified. DOCSIS 3.0 allows four or more 6-MHz channels to be combined into a single channel, substantially increasing bandwidth. Download speeds of 100 Mbps or more will be possible. UPC is testing DOCSIS 3.0 in areas where they are rolling out fiber. Competition between telephone companies and cable operators is raising average download speeds.

Download speeds in the Netherlands are already above average. Speeds of 10 Mbps are typical in most areas with many urban areas able to achieve download speeds up to 24 Mbps. Fast connections make broadband particularly attractive. Legislation enacted in 2006 allows municipalities and private companies to jointly build fiber networks. Several new fiber networks are being constructed in various cities in the Netherlands, including Amsterdam, which will further increase broadband speeds. The appeal of high speed options and triple play packages will continue to stimulate the broadband market.

We expect broadband penetration to pass 80 percent in 2008 and to exceed 90 percent by 2012. As the broadband universe approaches saturation, household growth will drop to low single-digit gains. Moreover, the Netherlands' penetration advantage will narrow during the next five years as the rest of Western Europe catches up. In 2007, broadband penetration in the Netherlands was 25.8 percent higher than that of Western Europe. By 2012, the differential will drop to 19.8 percent.



Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Of Internet households in the Netherlands, 87 percent had a broadband connection in 2007 compared to 77 percent for all of Western Europe. The number of dial-up subscribers in the Netherlands fell below 1 million in 2007 to 800,000, down 30.4 percent from 2006, while the broadband household universe rose 17.4 percent to 5.4 million. We expect the number of Internet households to increase from 6.2 million in 2007 to 7.07 million in 2012, an 870,000 gain. During the past five years, by contrast, the number of Internet households rose by 1.59 million, an 83 percent larger increase. Growth during the next five years will average 2.7 percent on a compound annual basis, less than half the 6.1 percent compound annual during the past years. We expect that by 2012, will remain only 70,000 dial-up subscribers, accounting for only 1 percent of the Internet subscriber base.

We expect that the number of broadband households will increase to 7 million by 2012, a 5.3 percent compound annual advance. By 2012, broadband penetration will reach 91.6 percent of all households, and overall Internet household penetration will rise to 92.5 percent.

Broadband subscriber growth and the concurrent growth in the uploading, downloading, and sharing of videos is putting pressure on the broadband infrastructure. To avoid running into a capacity bottleneck, broadband providers must deploy fiber optic cable and otherwise invest in their infrastructure. As this investment is expensive, we would expect that large companies will have an advantage over smaller companies and companies that cannot expand their capacity will experience share losses. We expect that there will be pressure on companies to consolidate.

Internet Households (Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Dial-Up	3.49	2.18	1.65	1.15	0.80	0.50	0.35	0.20	0.10	0.07	
% Change	–8.4	–37.5	–24.3	–30.3	–30.4	–37.5	–30.0	–42.9	–50.0	–30.0	–38.6
Broadband	1.40	2.90	3.95	4.60	5.40	6.00	6.35	6.60	6.80	7.00	
% Change	75.0	107.1	36.2	16.5	17.4	11.1	5.8	3.9	3.0	2.9	5.3
Total	4.89	5.08	5.60	5.75	6.20	6.50	6.70	6.80	6.90	7.07	
% Change	6.1	3.9	10.2	2.7	7.8	4.8	3.1	1.5	1.5	2.5	2.7

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Internet Household Penetration (%)

Category	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dial-Up	49.2	30.7	22.9	15.8	11.0	6.8	4.7	2.7	1.3	0.9
Broadband	19.7	40.8	54.9	63.0	74.0	81.1	85.1	87.8	89.7	91.6
Total	68.9	71.5	77.8	78.8	84.9	87.8	89.8	90.4	91.0	92.5

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

There are countervailing forces affecting broadband monthly fees. On the one hand, competition is putting downward pressure on pricing. At the same time, a number of subscribers are trading up to higher-speed services at higher rates, which is putting upward pressure on average fees. Increased investment on the part of providers to expand capacity and deliver faster speeds is also putting upward pressure on pricing. In 2007, the average broadband monthly fee fell 0.8 percent to € 24.00. This decline represented the smallest drop during the past five years. As more people opt for faster speeds we expect the overall average price to stabilize in 2008 and to reverse course as of 2009 with annual increases. By 2012, the average broadband subscriber will pay an estimated € 24.55 per month, up 0.5 percent on a compound annual basis from 2007. Broadband access spending will increase from € 1.6 billion in 2007 to € 2.1 billion in 2012, a 5.8 percent compound annual increase.

During the past two years, the rest of Western Europe began to catch up with the Netherlands in terms of broadband penetration, and the Netherlands' share of the broadband access spending fell by 0.8 percentage points to 4.6 percent. We expect this pattern to continue as the Netherlands market approaches saturation and the rest of Western Europe grows faster. By 2012, the Netherlands share will have fallen to an estimated 4.1 percent.

The dial-up market is essentially disappearing as households opt for broadband. With a majority of households having been on broadband for several years, Web sites are increasingly designed for broadband access. Graphics and moving elements are becoming common and are easily accessed via broadband. Dial-up users, however, experience delays in downloading content, and these delays have become more prevalent, further inducing dial-up subscribers to switch to broadband. Dial-up prices have been coming down in recent years but with Internet subscribers abandoning dial-up, there is little to be gained from additional price cuts. In fact, dial-up prices are now beginning to increase as providers try to shift subscribers to broadband while phasing out dial-up. We expect average dial-up prices to increase at a 1.0 percent compound annual rate to € 15.10 per month by 2012.

Dial-up access spending will fall from € 138 million in 2007 to only € 13 million in 2012, a 37.7 percent compound annual decrease. With the Netherlands adopting broadband faster than other countries, its dial-up market has also fallen faster. The Netherlands' share of the Western European dial-up market fell from 5.4 percent in 2003 to 2.4 percent in 2007. With the dial-share of subscribers expected to drop to only 1 percent in the Netherlands compared to 5 percent in all of Western Europe, the Netherlands share of dial-up spending will continue to fall. We expect that by 2012, it will be only 0.9 percent.

Mobile Access

The Netherlands has an active mobile Internet access market with 4.2 million subscribers in 2007 representing 25 percent of all wireless telephone subscribers. Leading wireless telephone operators upgraded their networks to 3G early in the decade, paving the way for mobile Internet access. More recently, wireless networks were further upgraded to High Speed Downlink Packet Access (HSDPA) which delivers download speeds up to 1.8 Mbps. HSDPA is now available to 90 percent of the population.

In October 2007, the International Telecommunication Union (ITU) approved WiMAX (worldwide interoperability for microwave access) as a global 3G standard. WiMAX is the trade name for a group of broadband wireless access technologies that emerged from the Institute of Electrical and Electronics Engineers (IEEE) 802.16 wireless metropolitan area network family of standards. Speeds up to 70 Mbps over a distance of 3 to 5 miles under certain conditions and up to 30 miles with line-of-sight to an outdoor antenna are

Broadband Access Market

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Subscribers (Millions)	1.40	2.90	3.95	4.60	5.40	6.00	6.35	6.60	6.80	7.00	
% Change	75.0	107.1	36.2	16.5	17.4	11.1	5.8	3.9	3.0	2.9	5.3
Average Monthly Fee (€)	26.40	25.40	24.60	24.20	24.00	24.00	24.10	24.25	24.40	24.55	
% Change	–2.2	–3.8	–3.1	–1.6	–0.8	0.0	0.4	0.6	0.6	0.6	0.5
Broadband Access Spending (€ Millions)	444	884	1,166	1,336	1,555	1,728	1,836	1,921	1,991	2,062	
% Change	71.4	99.1	31.9	14.6	16.4	11.1	6.3	4.6	3.6	3.6	5.8
Netherlands as a % of Western Europe	5.0	5.4	5.4	4.7	4.6	4.5	4.3	4.2	4.1	4.1	

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Dial-Up Access Market

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Subscribers (Millions)	3.49	2.18	1.65	1.15	0.80	0.50	0.35	0.20	0.10	0.07	
% Change	–8.4	–37.5	–24.3	–30.3	–30.4	–37.5	–30.0	–42.9	–50.0	–30.0	–38.6
Average Monthly Fee (€)	15.59	15.00	14.53	14.30	14.35	14.40	14.50	14.65	14.85	15.10	
% Change	–2.2	–3.8	–3.1	–1.6	0.3	0.3	0.7	1.0	1.4	1.7	1.0
Dial-Up Access Spending (€ Millions)	653	392	288	197	138	86	61	35	18	13	
% Change	–10.4	–40.0	–26.5	–31.6	–29.9	–37.7	–29.1	–42.6	–48.6	–27.8	–37.7
Netherlands as a % of Western Europe	5.4	4.0	3.3	2.8	2.4	1.8	1.6	1.2	0.8	0.9	

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

theoretically possible, making WiMAX a potential last-mile broadband access solution and a potential backhaul technology for 3G. In December 2005, the IEEE ratified 802.16e-2005 as a mobile WiMAX standard.

In 2008, the Dutch government will auction four mobile WiMAX (2.6 GHz) licenses. Worldmax, together with Callmax launched a (fixed) WiMAX (3.5 Ghz) service in June of 2008 for the Amsterdam region. WiMAX has the advantage of being a system built as a data service. By contrast, 3G networks were initially built for voice with data as an add-on. The roll-out of WiMAX will fuel growth in mobile access.

Wireless carriers are offering creative plans to attract subscribers. Vodafone teamed up with Google Search to offer Vodafone live!, which allows subscribers to search the entire Internet for a flat monthly fee of less than € 10. T-Mobile has a prepaid plan costing € 0.50 for 200 kbps with a cap of € 2.50 per day. T-Mobile also offers a € 2.50 per day flat rate plan.

The mobile access market will also be helped by the general migration of entertainment to mobile phones. KPN is introducing a mobile TV service that will transmit television programs to mobile telephone subscribers. Consumers also listen to music and play video games on their mobile phones. Handset manufacturers are introducing new handsets with entertainment specialties. Handsets with larger screens and full keyboards are ideally suited for Internet access. The growing comfort with using mobile phones for entertainment and information and the availability of handsets that facilitate Internet access will drive the mobile access market during the next five years.

We project the number of mobile Internet subscribers to more than double during the next five years to 8.7 million in 2012, a 15.7 percent compound annual increase. Penetration will rise from 25 percent in 2007 to 50 percent in 2012. Internet access is often offered in a media package that includes other services. We estimate that the average subscriber paid € 9.50 per month for mobile Internet access in 2007. Competition in the wireless market will put downward pressure on prices. We expect that average monthly spending will drop to € 8.00 by 2012. Decreasing prices will be another factor driving usage. Mobile Internet access spending will rise from € 479 million in 2007 to € 835 million in 2012, an 11.8 percent compound annual increase.

The Netherlands' mobile access market has grown faster than that of Western Europe during the past three years with the share rising from 4.3 percent in 2004 to 6.2 percent in 2007. We expect the rest of the region to catch up with the Netherlands during the next five years while growth in the Netherlands moderates. The Dutch share of Western Europe's mobile access spending will fall back to 4.5 percent by 2012.

Mobile Internet Access Market

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Wireless Telephone Subscribers (Millions)	13.2	14.8	15.8	16.5	16.7	16.9	17.0	17.1	17.2	17.3
Percent Accessing Internet Through Mobile Devices (%)	3	5	8	17	25	32	38	43	47	50
Mobile Internet Access Subscribers (Millions)	0.4	0.7	1.3	2.8	4.2	5.4	6.5	7.4	8.1	8.7
Average Monthly Spending (€)	13.00	12.00	11.00	10.00	9.50	9.00	8.75	8.50	8.25	8.00
Aggregate Annual Spending (€ Millions)	62	101	172	336	479	583	683	755	802	835
Netherlands as a % of Western Europe	4.6	4.3	4.5	5.8	6.2	5.5	5.2	5.0	4.7	4.5

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Mobile Internet Access Market Growth (%)

Netherlands	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Wireless Telephone Subscribers	12.1	6.8	4.4	1.2	1.2	0.6	0.6	0.6	0.6	0.7
Mobile Internet Access Subscribers	75.0	85.7	115.4	50.0	28.6	20.4	13.8	9.5	7.4	15.7
Average Monthly Spending	–7.7	–8.3	–9.1	–5.0	–5.3	–2.8	–2.9	–2.9	–3.0	–3.4
Aggregate Annual Spending	62.9	70.3	95.3	42.6	21.7	17.2	10.5	6.2	4.1	11.8

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Total Access Spending

Wired access spending growth will slow to a 4.2 percent compound annual increase, less than half the 10.4 percent rate achieved in 2007. Spending will rise from € 1.7 billion in 2007 to € 2.1 billion in 2012. When mobile access is included, total Internet access spending will increase from € 2.2 billion in 2007 to € 2.9 billion in 2012, growing at a 6.0 percent compound annual rate. Mobile access will account for 48 percent of that growth. In 2012, mobile access will comprise 29 percent of total access spending. The Netherlands share of the Western European access market will fall to 4.1 percent in 2012 from 4.6 percent in 2007.

Advertising

Wired Internet Advertising

Wired Internet advertising more than doubled in 2006 and rose by an additional 13.5 percent in 2007. Growth in 2006 was fueled by a surge in keyword search, classified, and video advertising, which jumped to € 427 million from € 153 million in 2005. Display advertising rose by 41.2 percent in 2006 and moderated to a 13.1 percent rise in 2007. As more people use the Internet, the medium becomes more attractive to advertisers. The Internet is one of the few advertising media where audiences are increasing. Expanding media typically generate more than proportional growth because advertisers value growth. The Internet has been no exception. Between 2003 and 2007, annual advertising per Internet household rose at a 56.5 percent compound annual rate compared with 40.1 percent compound annual growth in broadband households over the same period. The broadband household universe is the principal driver of Internet advertising because broadband users spend more time online than dial-up users and visit more Web sites, making them prime targets for search and online classified advertising. Broadband also facilitates video advertising, which is a rapidly growing component of the market.

The ability to track online behavior through the Web sites that a subscriber visits opens the door for advertising that can be targeted specifically to an individual's interests. Such advertising would be particularly relevant and effective. There are privacy concerns, however, which may impede the ability of advertisers to access or use such information. Some people would welcome advertising that meets their needs while others may be resistant to the collection and dissemination of their private details. The issue remains subject to discussion.

Further expansion in the broadband household universe will continue to stimulate Internet advertising. With the broadband market approaching saturation, however, broadband subscriber growth will moderate. Accordingly, we anticipate more moderate gains in Internet advertising during the next five years.

Search, classified and video advertising will continue to be the principal driver. The Internet is attracting classified advertising from the print media and sponsored search advertising is a natural extension of classifieds which do not have a print counterpart. We project this component to rise to € 915 million in 2012, a 13.5 percent compound annual increase from 2007. Display advertising will also grow at healthy rates, benefiting from continued expansion in the overall Internet audience and from the growing share of broadband. Display advertising will increase at a 10.9 percent compound annual rate from € 155 million

Internet Access Spending (€ Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Wired											
Dial-Up	653	392	288	197	138	86	61	35	18	13	
% Change	–10.4	–40.0	–26.5	–31.6	–29.9	–37.7	–29.1	–42.6	–48.6	–27.8	–37.7
Broadband	444	884	1,166	1,336	1,555	1,728	1,836	1,921	1,991	2,062	
% Change	71.4	99.1	31.9	14.6	16.4	11.1	6.3	4.6	3.6	3.6	5.8
Wired Total	1,097	1,276	1,454	1,533	1,693	1,814	1,897	1,956	2,009	2,075	
% Change	11.0	16.3	13.9	5.4	10.4	7.1	4.6	3.1	2.7	3.3	4.2
Mobile	62	101	172	336	479	583	683	755	802	835	
% Change	—	62.9	70.3	95.3	42.6	21.7	17.2	10.5	6.2	4.1	11.8
Total Access Spending	1,159	1,377	1,626	1,869	2,172	2,397	2,580	2,711	2,811	2,910	
% Change	17.3	18.8	18.1	14.9	16.2	10.4	7.6	5.1	3.7	3.5	6.0
Netherlands as a % of Western Europe	5.2	4.8	4.8	4.5	4.6	4.4	4.3	4.2	4.1	4.1	

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Wired Internet Advertising (€ Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Display	40	66	97	137	155	180	200	220	240	260	
% Change	25.0	65.0	47.0	41.2	13.1	16.1	11.1	10.0	9.1	8.3	10.9
Search, Classified, Video, Other	65	104	153	427	485	585	670	750	835	915	
% Change	22.6	60.0	47.1	179.1	13.6	20.6	14.5	11.9	11.3	9.6	13.5
Total Wired Internet Advertising	105	170	250	564	640	765	870	970	1,075	1,175	
% Change	23.5	61.9	47.1	125.6	13.5	19.5	13.7	11.5	10.8	9.3	12.9
Netherlands as a % of Western Europe	3.0	3.2	3.0	5.1	4.3	4.0	3.8	3.6	3.4	3.3	
Advertising Per Internet Household (€)	13	20	27	74	78	90	100	110	121	129	
% Change	18.2	53.8	35.0	174.1	5.4	15.4	11.1	10.0	10.0	6.6	10.6

Sources: Interactive Advertising Bureau Europe, Interactive Advertising Bureau Netherlands, PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates in 2007 to € 260 million in 2012. Total wired Internet advertising will reach € 1.2 billion in 2012 from € 640 million in 2007, a 12.9 percent increase compounded annually.

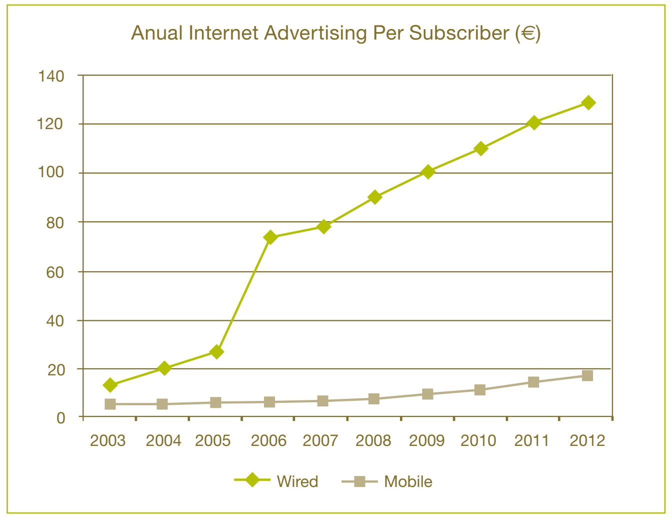
In addition to household growth, wired Internet advertising will be fueled by increases in advertising per household. Economic growth will account for part of the increase but the remainder reflects the fact that the market is expanding, and advertisers typically increase their per unit spending on expanding markets, which are viewed as more valuable than stable or contracting markets. We project that advertising per household will increase from € 78 in 2007 to € 129 in 2012, a 10.6 percent compound annual gain.

The Netherlands comprised 4.3 percent of Internet advertising in Western Europe in 2007. With the overall Netherlands Internet and broadband universe now growing more slowly than that of Western Europe, we expect slower growth in advertising as well. Consequently, we expect the Netherlands share to decrease to 3.3 percent by 2012.

Mobile Advertising

The mobile Internet advertising market is just getting established with spending at € 28 million in 2007. Advertisers spend much less per mobile Internet user than per wired Internet household, reflecting the fact that a large reach is proportionally more valuable to advertisers than a small reach and that the mobile market is still in its infancy. In 2007, for example, annual advertising per mobile subscriber was € 6.67, less than a tenth that of annual spending per wired Internet household. Annual advertising per mobile subscriber will remain well below annual advertising per wired Internet user during the next five years, reflecting the premium placed by advertisers on audience size.

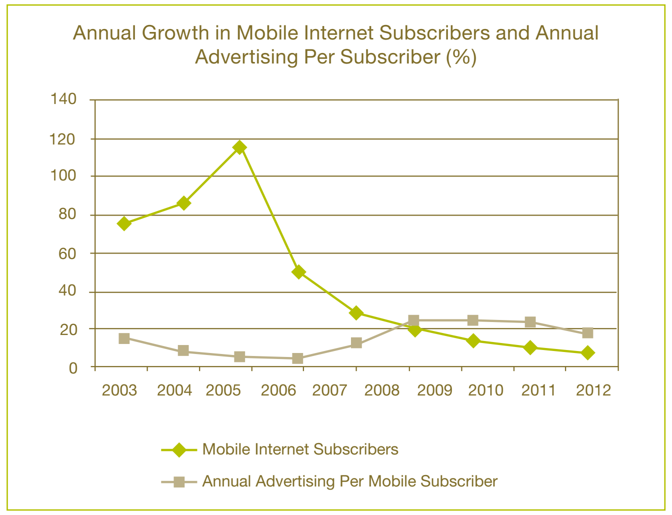
Flat rate pricing will boost mobile subscriptions and growing penetration of Internet-friendly handsets such as the Blackberry and the iPhone will induce subscribers to spend more time using their handsets to access the Internet. As



Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

these and other handsets designed to use the Internet gain penetration, mobile advertising will soar.

In contrast with the past five years when mobile advertising was fueled principally by growth in the number of mobile subscribers, during the next five years annual advertising per subscriber will be the principal driver. As mobile subscribers with updated handsets spend more time accessing the Internet, advertisers will spend more to reach them, which will lead to significant gains in advertising per subscriber. Moreover, we expect that mobile access will become a significant component of the market as it becomes an integral component of overall media advertising. As it does, advertisers will put more resources into mobile advertising. We project that per capita advertising growth will exceed mobile subscriber growth as of 2009 and will remain the faster growing component through 2012.



Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

During the next five years, the number of mobile Internet subscribers will expand at a 15.7 percent compound annual rate and annual advertising per subscriber will increase at a projected 20.1 percent compound annual rate to € 16.67 in 2012. Total spending on mobile advertising will rise to € 145 million in 2012, a 38.9 percent compound annual increase from 2007.

The Netherlands' share of Western Europe's total mobile advertising will fall from 6.1 percent in 2007 to 4.2 percent in 2012. As in other components of the market, the Netherlands is ahead of most other countries in Western Europe but during the next five years, the rest of the area will close the gap.

Mobile Internet Advertising (€ Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Mobile Advertising	2	4	8	18	28	40	60	85	115	145	
% Change	—	100.0	100.0	125.0	55.6	42.9	50.0	41.7	35.3	26.1	38.9
Annual Advertising Per Mobile Internet Subscriber (€)	5.00	5.71	6.15	6.43	6.67	7.41	9.23	11.49	14.20	16.67	
% Change	—	14.3	7.7	4.5	3.7	11.1	24.6	24.4	23.6	17.4	20.1
Netherlands as a % of Western Europe	4.9	5.0	5.2	6.3	6.1	5.0	4.8	4.7	4.5	4.2	

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Total Internet Advertising

Total Internet advertising will increase from € 668 million in 2007 to € 1.3 billion in 2012, growing at a 14.6 percent compound annual rate. Mobile advertising will account for 11 percent of total Internet advertising in 2012 compared to 4 percent in 2007. The Netherlands' share of total Western Europe Internet advertising will fall from 5.7 percent in 2007 to 4.3 percent in 2012.

Mobile Internet Advertising Wired and Mobile (€ Millions)

Netherlands	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008-2012 CAGR
Wired Internet Advertising	105	170	250	564	640	765	870	970	1,075	1,175	
% Change	23.5	61.9	47.1	125.6	13.5	19.5	13.7	11.5	10.8	9.3	12.9
Mobile Advertising	2	4	8	18	28	40	60	85	115	145	
% Change	—	100.0	100.0	125.0	55.6	42.9	50.0	41.7	35.3	26.1	38.9
Total Advertising	107	174	258	582	668	805	930	1,055	1,190	1,320	
% Change	25.9	62.6	48.3	125.6	14.8	20.5	15.5	13.4	12.8	10.9	14.6
Netherlands as a % of Western Europe	4.8	5.3	4.9	6.8	5.7	5.3	4.9	4.6	4.4	4.3	

Sources: Interactive Advertising Bureau Europe, PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates