
Coaxial Cable in European Homes

IMS Research Survey

Commissioned by the Multimedia over Coax Alliance (MoCA)

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- Study Justification

- MoCA technology is designed specifically for coaxial cabling
- MoCA compatible with all pay-TV platforms
(Cable, Satellite, IPTV, Terrestrial)
- MoCA's first target market was US, where 100 million homes have coaxial cabling (90% of homes) and the majority of pay-TV subscribers have multiple set-top boxes
- MoCA approached IMS to determine if there were European homes were addressable with its technology
 - i.e. those homes with multiple coaxial cable outlets

— Study Methodology

- Four countries chosen for first round - France, The Netherlands, Poland, and the UK
- Selection Criteria used:
 - Wanted cross-section of competitive European pay-TV markets
 - Presence of prominent multinational pay-TV operators
 - Growing purchase of HDTV and PVRs
 - High TV viewing hours per day, high TVs per household
 - Market size
- Online survey administered between Feb 11 and Feb 22
- Target of 384 respondents per country (5% margin of error)
- Confidence intervals of 95%, two tailed
- Linear regression and discriminant analysis (for homes with 2+ and with 3+ cable drops) - in both cases a stepwise method of variable selection was used
- Factor analysis was used to condense variables, but generally the discriminant or regression analysis using “raw” variables was as good as or better than the analysis using “condensed” variables

- Results - Addressable Segments Found

- Found substantial segments in each country with 2 or more outlets per home
- We were surprised by the results from the Netherlands and Poland
 - Despite 71% cable penetration in the Netherlands, the number of outlets is relatively low, with only 45% of homes having 2 or more
 - Poland was also surprising as market with the most drops per home

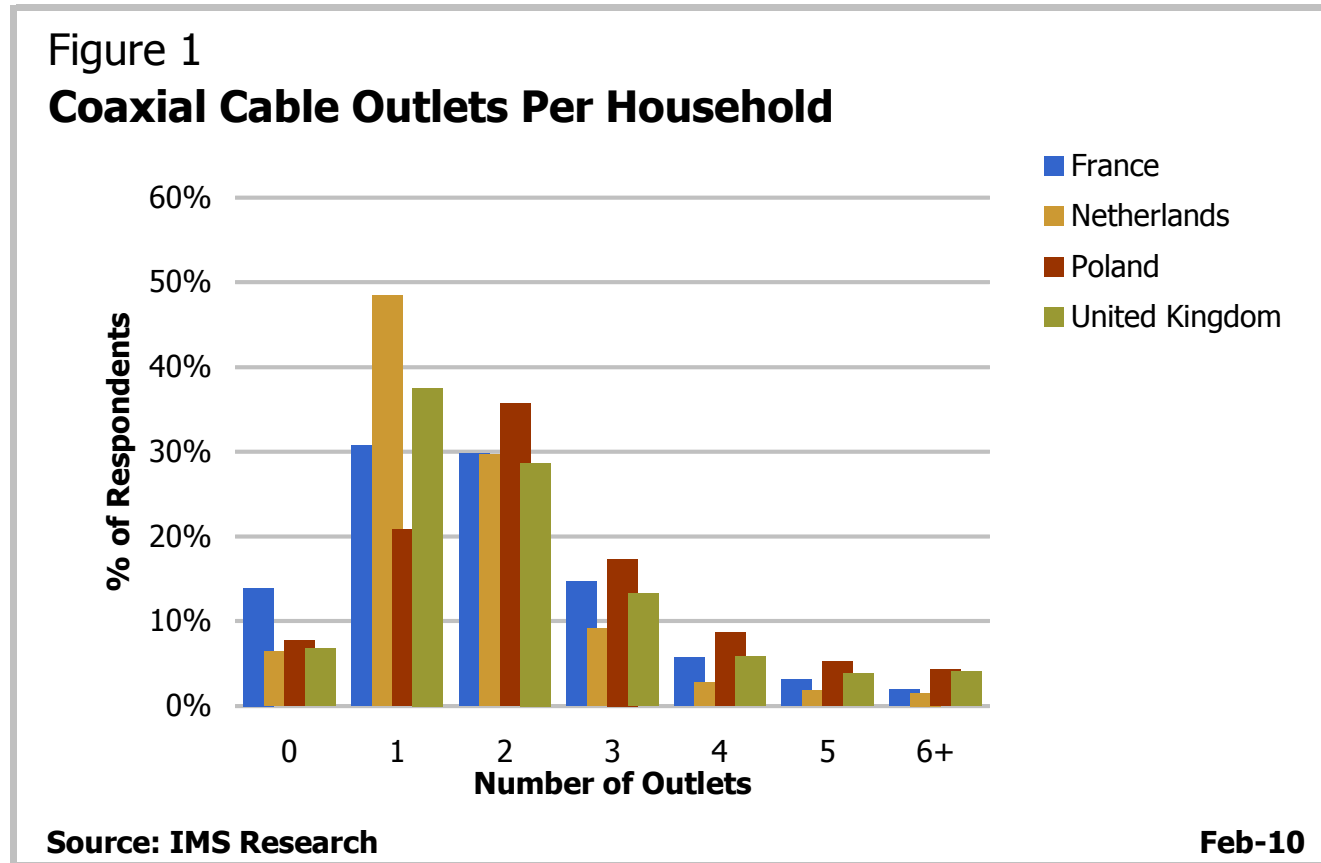
Table 1
Coaxial Cable Outlets - Survey Results

	France	Netherlands	Poland	United Kingdom
Respondents	416	326	437	397
Average Coax Outlets	1.9	1.7	2.4	2.0
"At least" (95% CI)	1.7	1.5	2.2	1.9
% with 2 or more	55%	45%	71%	56%
"At least" (95% CI)	51%	40%	67%	51%
% with 3 or more	25%	15%	36%	27%
"At least" (95% CI)	21%	11%	31%	23%
% of Respondents by Number of Coax Outlets				
0	14%	6%	8%	7%
1	31%	48%	21%	38%
2	30%	30%	36%	29%
3	15%	9%	17%	13%
4	6%	3%	9%	6%
5	3%	2%	5%	4%
6+	2%	2%	4%	4%

Source: IMS Research

Feb-10

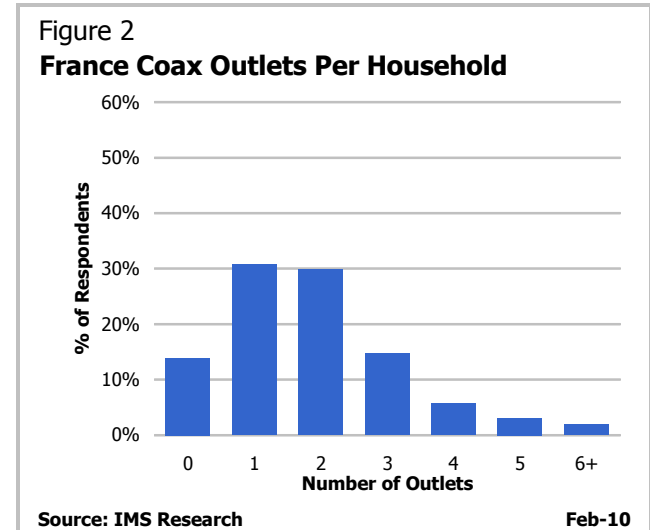
- Coax Outlets Per Home - Histogram



- France & UK very similar
 - France has more 0-outlet homes, which are the same to MoCA as 1-outlet homes
 - UK has slightly longer tail
- Poland completely different - certainly some sample bias (broadband) but the segment is clearly *very real*
- Netherlands has smallest addressable market of the four

France

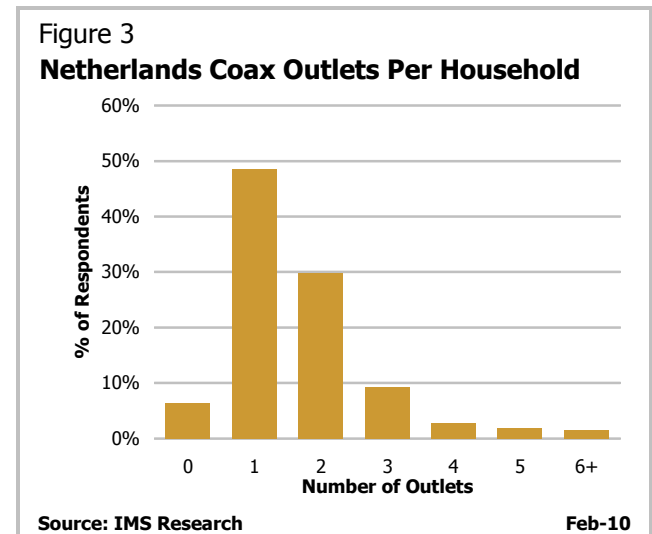
- Avg 1.9 drops, 55% w/ 2 or more, 25% w/ 3 or more, 27 Million TV HHs
- Multiple coax outlets correlates most closely to the presence of TVs and STBs in the homes of French respondents
 - Each additional TV will attract on average 0.45 coax drops, each additional STB 0.3.



- Intent to purchase a new TV also correlated to the number of coax outlets
- Each €8000 in income also resulted in an additional coax outlet. (This is correlated to home ownership as well.)
- TNTSat significantly correlated to 2+ drops but not to 3+

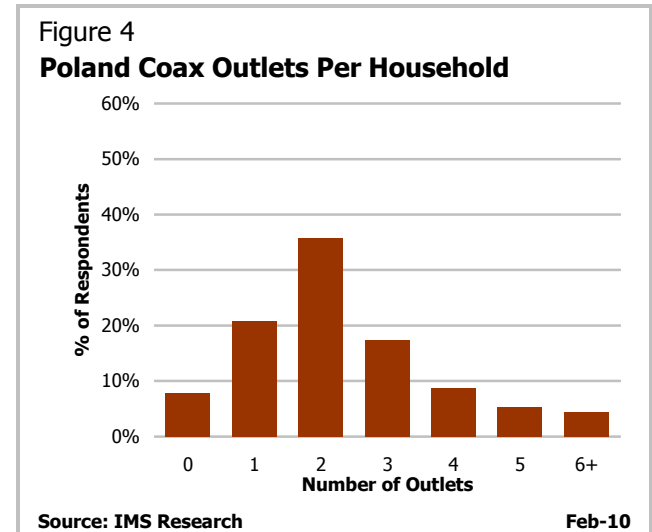
- Netherlands

- Avg 1.7 drops, 45% w/ 2 or more, 15% w/ 3 or more, 8 Million TV HHs
- Netherlands results surprising - highest cable penetration w/ lowest drops per home.
- The only country for which cable modem usage is correlated to drop count (0.23 per modem)
- The set of responses that had the greatest affect on the number of coax outlets is if a home is *not* a Digitenne subscriber (which is also negatively correlated to cable modem use)



Poland

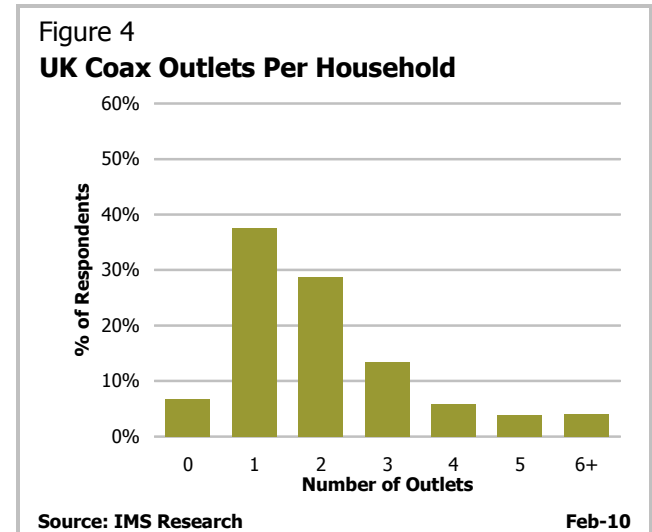
- Avg 2.4 drops, 71% w/ 2 or more, 36% w/ 3 or more, 15 Million TV HHs
- Number of coax outlets was strongly driven by demand for the signals they provide
 - Each TV is correlated to 0.65 outlets, each STB to 0.31 - also closely related to intent to purchase a new TV



- Poles seem to understand TV market in detail - if survey didn't have the exact service they had, they checked "other" and filled out the "other" fields in great detail.
- Those homes with fewer than 2 coax ports seem to be those that don't place great value on television and don't buy many televisions
- Homes with 3 or more drops mainly tended to have higher-than-average numbers of TVs and DVRs, though fewer people per TV than average. They also tended to be cable subscribers.

- United Kingdom

- Avg at least 2.0 drops, 56% w/ 2 or more, 27% w/ 3 or more, 27 Million TV HHs
- As elsewhere, the primary drivers of high numbers of coax connections are numbers of TVs & DVRs. (0.3 outlets per TV, 0.5 outlets per DVR)
- Homes with 2 or more outlets tended to be younger, and have PVRs
- Homes with 3 or more have higher incomes, and more TVs, especially flat-panel TVs.



- Sample Representativeness

- No major sampling biases were found that would result in an overestimation of the number of coax drops per home
 - Poland pay satellite penetration is most significant deviation - adjustment would add 0.3 to the average.
- For a result to need adjustment, both a significant deviation from the “true” situation must be shown and also a significant correlation between that variable and the number of coax outlets

Table 2

Sample Representativeness Measures

	France	Netherlands	Poland	United Kingdom
Demographics				
% Female	49%	57%	50%	56%
% 18-24	12%	7%	16%	14%
% 25-34	19%	13%	20%	24%
% 35-44	19%	23%	17%	23%
% 45-54	18%	25%	20%	18%
% 55+	32%	30%	27%	20%
Survey % Pay Satellite	22%	9%	7%	44%
Survey % Cable	12%	71%	45%	22%
Survey % IPTV	38%	5%	5%	3%
Actual % Pay Satellite	22%	10%	37%	33%
Actual % Cable	13%	70%	31%	14%
Actual % IPTV	22%	3%	2%	2%
Correlation Coefficient of Coax Outlets With:				
Female	0.01	-0.03	-0.08	-0.17
Age	0.01	0.04	0.05	0.01
Pay Satellite	0.03	0.03	0.15	0.04
Cable	0.00	0.13	0.01	-0.02
IPTV	-0.04	-0.13	-0.01	0.10
Source: IMS Research				
Feb-10				

Recap

- France & UK results comparable, with about 55% of respondents having 2 or more coax outlets in their home
- Netherlands lowest, with just 45% with 2 or more
- Poland highest, with 71% having 2 or more
- In all countries except Netherlands, number of TVs, Set-top Boxes, or DVRs significantly correlated to number of coaxial outlets
- The natural conclusion from these correlations is that the coaxial outlets are added as more TVs are determined to be “needed” by a household
- Therefore, it is possible that increasing the value of TVs in secondary rooms will motivate consumers to add coax drops
- In Europe, coax drop counts dependent on building codes, post-war reconstruction level, history of TV industry, and other nation-specific factors - therefore results cannot be easily extrapolated to other countries
- More research needed

Table 1b
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