OUR VISION FOR THE NEXT 5 YEARS

NIELSEN ADMOSPHERE
5 YEARS IN BULGARIA
WELCOME
AGENDA

• Foreword
• Nielsen’s global strategy – Focusing on International Media Measurement
• Global development of TV viewing
• Millenials
• TAM and development of TV viewing in Bulgaria
• Timeshift viewing trends – globally and in Bulgaria
• Radio listening trends in Bulgaria
• Monitoring services
• What will be next?
• Tools
• Q&A
AGENDA

• Nielsen’s global strategy – Focusing on International Media Measurement
CLAIRE HARRIS
Commercial Leader
Nielsen
NIELSEN’S GLOBAL STRATEGY
Focusing on International Media Measurement

Claire Harris
Sofia, Bulgaria 28 November 2017
OUR MISSION
The most complete understanding of consumers worldwide.

OUR PROMISE
An uncommon sense of the consumer for faster, smarter, more confident decisions that *improve performance*
REACHING YOUR AUDIENCE USED TO BE SIMPLER
BUT THE MEDIA LANDSCAPE HAS CHANGED
WE MAKE SENSE OF THE CONSUMER’S WORLD

Data assets, science & technology
We measure the activity of more than 500,000 online panelists worldwide.

We capture 85 million retail product transactions a year in 350,000+ stores globally.

We measure media in 47 countries, representing around 80% of global advertising spend.
THE CHANGING MEDIA LANDSCAPE
CONSUMERS HAVE MORE CHOICES THAN EVER TO ENGAGE WITH CONTENT

Self-reported paid services used to watch broadcast and/or VOD programming

Online devices used to watch VOD programming (Europe only)

**Europe**
- 77% Computer
- 45% Mobile Phone
- 41% Tablet

**North America**
- 37% Smart TV
- 11% Game Console
- 6% Blu-ray Player

Source: Global Video on Demand Report, March 2016

Base: All those who watch any type of video-on-demand programming in Europe n=8235
MARKETERS ARE MOVING BUDGETS TO WHERE THEIR CONSUMERS ARE
Digital spend is outpacing TV, while mobile catches up.

European Ad Spend 2016-2020

Source: PwC Global Entertainment and Media Outlook 2016-2020, *Desktop and mobile include search and video
MORE MEDIA USE CONTINUES TO FILL UP A CONSUMER’S DAY

Across select countries, traditional TV holds steady, digital grows

<table>
<thead>
<tr>
<th>Country</th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>50:00</td>
<td>49:42</td>
</tr>
<tr>
<td></td>
<td>15:42</td>
<td>18:30</td>
</tr>
<tr>
<td></td>
<td>1:00</td>
<td>1:12</td>
</tr>
<tr>
<td></td>
<td>25:48</td>
<td>22:30</td>
</tr>
<tr>
<td>Australia</td>
<td>59:18</td>
<td>60:18</td>
</tr>
<tr>
<td></td>
<td>23:18</td>
<td>25:18</td>
</tr>
<tr>
<td></td>
<td>5:00</td>
<td>4:00</td>
</tr>
<tr>
<td></td>
<td>8:00</td>
<td>7:00</td>
</tr>
<tr>
<td>Japan</td>
<td>46:30</td>
<td>48:12</td>
</tr>
<tr>
<td></td>
<td>18:00</td>
<td>20:42</td>
</tr>
<tr>
<td></td>
<td>2:30</td>
<td>2:18</td>
</tr>
<tr>
<td></td>
<td>2:24</td>
<td>2:24</td>
</tr>
<tr>
<td>Italy</td>
<td>39:12</td>
<td>39:36</td>
</tr>
<tr>
<td></td>
<td>4:36</td>
<td>5:36</td>
</tr>
<tr>
<td></td>
<td>1:54</td>
<td>1:42</td>
</tr>
<tr>
<td></td>
<td>2:24</td>
<td>2:48</td>
</tr>
<tr>
<td></td>
<td>30:18</td>
<td>29:30</td>
</tr>
</tbody>
</table>

(Average weekly hours hh:mm)

Source: Nielsen/IBOPE, IAB, TGI, Nielsen Connected Consumer Report 2015 Australia, Nielsen Consumer and Media view, AudiTel, Audi Web, Eurisko, Audipress
MORE MEDIA USE CONTINUES TO FILL UP A CONSUMER’S DAY – U.S. SPOTLIGHT

Weekly Time Spent in the Total US Population – Based on Qtr 4, P18+

Source: Nielsen US Total Audience Report and Audience Insights Analysis
VIEWERS FIND VIDEO ON DEMAND CONVENIENT

Percentage of European VOD viewers who agree with the statement…

80%
I can view at a time that is convenient to me

68%
I can catch up on multiple episodes at one time

62%
I wish there were more VOD programming choices available

63%
Watching VOD programming on an online or mobile device is not as good as watching on a bigger screen

Source: Nielsen Global Video on Demand Report, March 2016 – European responses only
VOD CONTRIBUTES A SIGNIFICANT AUDIENCE BEYOND THE LIVE BROADCAST

28% Average Lift From VOD

*Good Behavior* Season 1 on TNT Viewing out to Day 35
Average Audience % Distribution, P18-49

Source: Nielsen National TV Ratings and VOD Content Ratings, Turner Network Television, Good Behavior, 11/13/2016 – 02/14/2017, P18-49
CHANGING MEDIA HABITS HAVE DISRUPTED TRADITIONAL METRICS AND MEASUREMENT

MARKETERS:
WHERE DO I FOCUS ON? HOW DO I REACH MY CONSUMERS?

CONTENT OWNERS:
HOW CAN I GET FULL CREDIT FOR MY AUDIENCE?

Nielsen’s Total Audience measurement framework solves a clear industry need
LINES ARE BLURRED BETWEEN TV AND DIGITAL

Metrics need to align to avoid confusion

- **FRAGMENTATION OF HOW PEOPLE ARE ACCESSING CONTENT**
- **BLURRING THE LINES AROUND WHAT IS DIGITAL VS TV**
- **A NEED TO INTRODUCE COMPARABLE METRICS ACROSS TRADITIONAL AND DIGITAL MEDIA TO REDUCE CONFUSION**
- **INDUSTRY NEEDS TO BE ABLE TO ALIGN TV AND DIGITAL SIDE BY SIDE TO MAKE BETTER INFORMED DECISIONS**
## HOW DO WE CREATE COMPARABLE METRICS ACROSS DIGITAL AND TV ADS?

<table>
<thead>
<tr>
<th></th>
<th>TV</th>
<th>VOD</th>
<th>OVER THE TOP</th>
<th>COMPUTER</th>
<th>TABLET</th>
<th>MOBILE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linear</strong></td>
<td>PROGRAM &amp; ADS</td>
<td>SAME AD LOAD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic</strong></td>
<td>CONTENT</td>
<td>CONTENT HAS DYNAMIC AD LOADS, OR NO ADS AT ALL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADS</td>
<td>ADS CAN BE DYNAMIC – DIFFERENT VIEWER TO VIEWER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CENSUS METHODOLOGY FOR MOST GRANULAR DIGITAL MEASUREMENT

1. TAG:
Clients integrate SDK for content or Tags for Ads

2. COUNT:
Demographics via third-party data provider

3. CALIBRATE:
Demographics against Nielsen Panels and Mobile Probability Surveys

4. CALCULATE:
Reach, frequency, GRPs and other metrics

5. REPORT:
Daily, actionable insights

Nielsen Digital Ad Ratings and Nielsen Digital Content Ratings
Both leverage the same privacy-protected methodology
PUTTING TOTAL AUDIENCE INTO ACTION
**DIGITAL AD RATINGS:**
GLOBAL INDUSTRY STANDARD FOR DIGITAL MEASUREMENT

<table>
<thead>
<tr>
<th>Through 2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>Germany</td>
<td>Spain</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>China</td>
<td>Greece</td>
</tr>
<tr>
<td>Australia</td>
<td>Mexico</td>
<td>Hungary</td>
</tr>
<tr>
<td>Italy</td>
<td>Philippines</td>
<td>Belgium</td>
</tr>
<tr>
<td>India</td>
<td>Canada</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Japan</td>
<td>France</td>
<td>Norway</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>Czech Republic</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td></td>
</tr>
</tbody>
</table>

Coverage Expansion

- Integrated into Google DoubleClick Bid Manager in select countries
- Viewability measurement, viewable GRPs
- Twitter mobile app audience measurement
TOTAL AD RATINGS: MEASURES YOUR TOTAL ADVERTISING AUDIENCE ACROSS SCREENS

- Who is your ad campaign reaching on TV and digital
- How are your ads working together to optimize reach
- Unduplicated TV + digital measurement comparable to Nielsen TV Ratings

<table>
<thead>
<tr>
<th>Digital Ad Ratings</th>
<th>Digital Ad Ratings + Total Ad Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>United States</td>
</tr>
<tr>
<td>Japan</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>China</td>
<td>Italy</td>
</tr>
<tr>
<td>Canada</td>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
<td>Brazil</td>
</tr>
<tr>
<td>Singapore</td>
<td>Mexico</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Philippines</td>
</tr>
<tr>
<td>Australia</td>
<td>Thailand</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Indonesia (2018)</td>
</tr>
<tr>
<td>Hong Kong</td>
<td></td>
</tr>
</tbody>
</table>
DIGITAL CONTENT RATINGS PROVIDES SAME TOTAL AUDIENCE VIEW FOR CONTENT

- The complete audience for your digital content
- Measures all devices and platforms, including streaming video, static web pages and mobile apps
- Metrics comparable to TV for cross-platform planning

### Digital Ad Ratings

- India
- China
- Canada
- Singapore
- Malaysia
- New Zealand
- Hong Kong
- South Africa
- Puerto Rico
- Turkey
- Taiwan
- Poland
- Ireland
- Spain
- Greece
- Hungary

### + Total Ad Ratings

- Netherlands
- Belgium
- Czech Republic
- United Arab Emirates
- Norway
- United Kingdom
- Mexico
- Philippines
- Indonesia (2018)
- France
- Brazil

### Digital Ad Ratings + Digital Content Ratings

- United States (+TAR)
- Thailand (+TAR)
- Australia
- Japan
- Germany
- Italy (2018)
TOTAL AUDIENCE MEETS A CLEAR MARKET NEED

- COMMON LANGUAGE & COMPARABLE, PEOPLE-BASED METRICS ACROSS SCREENS
- SEIZE THE OPPORTUNITY BY BRINGING MEASUREMENT TOGETHER
- IT’S A TEAM SPORT SO LEAN IN AND PARTICIPATE
NIELSEN TOTAL AUDIENCE

PLAN, ACTIVATE AND MEASURE WITH CONFIDENCE.
AGENDA

• Global development of TV viewing
TEREZA ŠIMEČKOVÁ
Chairwoman
Nielsen Admsphere
YOUR BUSINESS IS OUR BUSINESS
DANIEL CHORBADJIAN
Eastern Europe Cluster Leader,
Emerging markets
Nielsen

SVYATOSLAVA SVYST
Market Leader, Bulgaria
& RV&RA Leader
Nielsen
REACHING YOUR AUDIENCE AT EVERY LEVEL

DATA
- Complete
- Trusted
- Useful

SCIENCE
- Analytics Solutions
- Marketing Effectiveness
GLOBAL TV VIEWING TRENDS
REGIONAL SITUATION

Source: Eurodata TV Worldwide – One Television Year in the World 2017 issue
EUROPE AVERAGE VIEWING TIME
Per individual (in h:mm)

Source: Eurodata TV Worldwide – One Television Year in the World 2017 issue
VIEWING TRENDS IN EUROPE
Live+Playback, Minutes/person

Source: Eurodata TV Worldwide – One Television Year in the World 2017 issue; Total Individuals
AGENDA

• Millennials
IVAN GENCHEV
Managing Director
Nielsen Admosphere Bulgaria

MAGIDA SUKKARI
International Business Development Director
Nielsen Admosphere
MILLENNIAL LIFE STAGES

**Stage 1**
**DEPENDENT ADULTS**
Living in someone else’s home

**Stage 2**
**ON THEIR OWN**
Living in their own home – no children

**Stage 3**
**STARTING A FAMILY**
Living in their own home with children

Source: Nielsen NPM Panel
STARTING A FAMILY’S WATCH MORE LIVE TV

Source: US Nielsen NPM Panel
“TV Connected Devices” includes DVR, Videogame Console, DVD, VCR, Multimedia Devices
STARTING A FAMILY’S USE MORE DVR/DVD

- **Persons 18-34**
  - DVD Playback: 0:08
  - Multimedia Devices: 0:17
  - Video Game Console: 0:34
  - DVR Playback: 0:22

- **Dependent Adults**
  - DVD Playback: 0:06
  - Multimedia Devices: 0:12
  - Video Game Console: 0:34
  - DVR Playback: 0:18

- **On Their Own**
  - DVD Playback: 0:07
  - Multimedia Devices: 0:24
  - Video Game Console: 0:39
  - DVR Playback: 0:20

- **Starting a Family**
  - DVD Playback: 0:10
  - Multimedia Devices: 0:17
  - Video Game Console: 0:25
  - DVR Playback: 0:29

Source: Nielsen NPM Panel
Note: Trace amount of VCR Usage too small to show.
**TV GENRE VIEWING**

Different Millennial Life Stages vs index for different genres

<table>
<thead>
<tr>
<th>Stage 1 – Dependent Adults</th>
<th>Hrs:Mins</th>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evening Animation</td>
<td>40:51</td>
<td>123</td>
</tr>
<tr>
<td>Popular Music</td>
<td>35:37</td>
<td>118</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2 – On Their Own</th>
<th>Hrs:Mins</th>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Event</td>
<td>70:09</td>
<td>129</td>
</tr>
<tr>
<td>Sports Commentary</td>
<td>37:06</td>
<td>137</td>
</tr>
<tr>
<td>Instruction, Advice</td>
<td>33:58</td>
<td>125</td>
</tr>
<tr>
<td>News</td>
<td>25:44</td>
<td>119</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3 – Starting a Family</th>
<th>Hrs:Mins</th>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Multi-Weekly</td>
<td>145:01</td>
<td>140</td>
</tr>
<tr>
<td>Spanish-Language Nets</td>
<td>104:40</td>
<td>156</td>
</tr>
</tbody>
</table>

Source: Nielsen NPM Panel, All Broadcast/Cable Programs
DIGITAL USAGE DOES NOT FOLLOW PENETRATION

<table>
<thead>
<tr>
<th>Source: Nielsen NetView (PC), EMM Panels (Smartphone, Tablet)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>24,5%</strong></td>
</tr>
<tr>
<td><strong>31,6%</strong></td>
</tr>
<tr>
<td><strong>28,1%</strong></td>
</tr>
</tbody>
</table>
WHAT MIGHT HAPPEN IN THE NEXT 5 YEARS?

**Multimedia device** usage will be higher than it is for current 35-39s.

**Tablet penetration** will increase.
WHAT MIGHT HAPPEN IN THE NEXT 5 YEARS?

Millennials will watch more live TV and listen to more radio.

Millennials will do more on-demand viewing than current 35-39s.

Millennials will have less videogame console usage.
WHAT MIGHT HAPPEN IN THE NEXT 5 YEARS?

On Their Own Millennials are more likely to have a Pay TV subscription than they do today.

On Their Own millennials are likely to have more DVR usage.
AGENDA

- TAM and development of TV viewing in Bulgaria
BG TAM

...and development of TV viewing in Bulgaria
NIELSEN ADMOSPHERE TAM DATA IN BG

Basic facts

Audiomatching

All TV platforms
- satellite, cable,
- IPTV, terrestrial

Live and timeshifted
- TV audience

Results representativeness
- 11 panel controls

Panel 1,300 households
- (1,100 Net)
- rotation 25% per year

Real Time Data

All TV’s in households

Data up to the level of seconds

Continual survey
- 6,600 households/year

Results representativeness
- 11 panel controls

Data available next morning until 9:00 a.m.

Audited Quality Check
- Summer 2014

Regular Quality Check
- by Nielsen
PANEL CONTROLS
11 Variables / 46 Categories

Sex (2 categories) Settlement size (6) No. of active TV sets (2)
Age (9) Region (8) Cable/IPTV signal reception (2)
Education (3) Household size (5) Satellite signal reception (2)
Economic activity (3) Declared TV audience (4)
TAM BG DATA – ATS DEVELOPMENT

4+, ATS - Monthly time spent (hh:mm:ss)

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 2015 - 2017
TAM BG DATA – ATS DEVELOPMENT
Adults 18-49, ATS - Monthly time spent

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 2015 - 2017
TAM BG DATA – ATS DEVELOPMENT
Millenials 18-34, ATS - Monthly time spent

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 2015 - 2017
TAM BG DATA – ATS DEVELOPMENT

Kids upto 14 y.o., ATS - Monthly time spent

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 2015 - 2017
### CONTINUOUS SURVEY – EQUIPMENT

Trends in personal and household equipment

<table>
<thead>
<tr>
<th>Internet home</th>
<th>Desktop computer</th>
<th>Notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>62 %</td>
<td>35 %</td>
</tr>
<tr>
<td>vs. 2016</td>
<td>+3 %</td>
<td>---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tablet</th>
<th>Smartphone</th>
<th>Flat TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>26 %</td>
<td>53 %</td>
</tr>
<tr>
<td>vs. 2016</td>
<td>+13 %</td>
<td>+13 %</td>
</tr>
</tbody>
</table>

Source: Nielsen Admosphere Bulgaria, Continual Survey
Period: 2016-2017, all households, N = 6548, 6546
## ENHANCEMENT OF TAM DATA

**ABCDE classification**

Segments households according to their **social, economic and educational characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Internet home</th>
<th>Desktop computer</th>
<th>Notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups A+B</td>
<td>93%</td>
<td>55%</td>
<td>65%</td>
</tr>
<tr>
<td>Groups D+E</td>
<td>18%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Tablet</th>
<th>Smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups A+B</td>
<td>44%</td>
<td>87%</td>
</tr>
<tr>
<td>Groups D+E</td>
<td>6%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: Nielsen Admosphere Bulgaria, Continual Survey
Period: 2017; all households, N = 6546
AGENDA

- Timeshift phenomenon – globally and in Bulgaria
TIMESHIFT PHENOMENON
TIMESHIFT VIEWING AROUND THE WORLD
Live vs. consolidated viewing time in 30 countries

Bulgaria, 4+

4h16

+ 3 min

4h13

2016

TIMESHIFT VIEWING VS TV GENRES

Additional percentages by Timeshifted viewing

Entertainment

Fiction
(drama, comedy, series)

Sources: Eurodata TV Worldwide – One Television Year in the World 2016 issue; USA, GB, France, Italy
TIMESHIFT VIEWING VS TV GENRES
Additional percentages by Timeshifted viewing

Entertainment

Fiction
(drama, comedy, series)

Sept. 2015  +17%

Sept. 2015  +30%

Sources: Eurodata TV Worldwide – One Television Year in the World 2016 issue; GB
TIMESHIFT VIEWING VS TV GENRES
Additional percentages by Timeshifted viewing

Sport

Sept. 2015 +5%

Sources: Eurodata TV Worldwide – One Television Year in the World 2016 issue; USA, GB, France, Italy
TIMESHIFT NIELSEN METHODOLOGY

How do we measure it?

- audiomatching technology, i.e. the methodology is the same as with live TV audience

- approach used in vast majority of developed European countries

- measuring THE WHOLE LOT – all households in the panel and on all the TVs in these households

- 7 days horizon
  - covering from the day of live broadcast up to the end of the 7th day following the date
WHAT IS BEHIND TIMESHIFT VIEWING?
IPTV and timeshift viewing (% of live TV, 4+, total and according to signal reception)

IPTV growth

Source: Nielsen Admosphere Bulgaria, Continual Survey
Period: 2015-2017; all households, N = 6 534, 6548, 6546

Timeshift

Source: Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM
TIMESHIFT IN BULGARIA
Timeshift audience on 4+ makes additional 2%

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 2016 - 2017
TIMESHIFT IN BULGARIA

VOSDAL (Viewed On Same Day As Live) makes around 75%

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 1.1. – 15.11. 2017
WHAT IS MOST VIEWED TIMEShiftED IN BG?
Commercials are often “skipped” within Timeshifted viewing

<table>
<thead>
<tr>
<th>Program type</th>
<th>Timeshift TV as % out of live TV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4+</td>
</tr>
<tr>
<td>Regular program</td>
<td>2.0%</td>
</tr>
<tr>
<td>Commercial</td>
<td>1.3%</td>
</tr>
<tr>
<td>Promo</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total regular programs</td>
<td>1.9%</td>
</tr>
<tr>
<td>Reality show</td>
<td>3.6%</td>
</tr>
<tr>
<td>Cartoon</td>
<td>3.3%</td>
</tr>
<tr>
<td>Multipart drama program, series</td>
<td>2.8%</td>
</tr>
<tr>
<td>Children series</td>
<td>2.4%</td>
</tr>
<tr>
<td>Performed or animated film</td>
<td>2.2%</td>
</tr>
<tr>
<td>Culinary program</td>
<td>2.2%</td>
</tr>
<tr>
<td>Music program</td>
<td>1.9%</td>
</tr>
<tr>
<td>Adult education program</td>
<td>1.8%</td>
</tr>
<tr>
<td>Documentary program</td>
<td>1.4%</td>
</tr>
<tr>
<td>News coverage</td>
<td>1.3%</td>
</tr>
<tr>
<td>Competition</td>
<td>1.1%</td>
</tr>
<tr>
<td>Entertainment program</td>
<td>1.1%</td>
</tr>
<tr>
<td>Journalistic program</td>
<td>1.0%</td>
</tr>
<tr>
<td>Sports program</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: Nielsen Admosphere Bulgaria, National Bulgarian TAM, 1.1. – 15.11. 2017, chosen program types
AGENDA

• Radio listening trends in Bulgaria
RADIO LISTENING TRENDS IN BULGARIA
RADIO BG DATA
Development of Weekly Reach

1Q 2015
4 460 947

4 490 555

4 591 219

1Q 2017

Source: Nielsen Admosphere Bulgaria - Национално представително изследване на радио аудиторията в България, 1Q 2015, 1Q 2017
RADIO BG DATA
Share of demographic groups 15-69 y.o.

Employed
76.5% 75.9%

Unemployed
4.4% 4.4%

Retired
11.7% 12.0%

Students
4.8% 5.7%

Other
2.5% 2.0%

Source: Nielsen Admosphere Bulgaria - Национално представително изследване на радио аудиторията в България, 1Q 2015, 1Q 2017
RADIO BG DATA
Share of demographic groups 15-69 y.o.

Source: Nielsen Admosphere Bulgaria - Национално представително изследване на радио аудиторията в България, 1Q 2015, 1Q 2017
AGENDA

- Monitoring services
MONITORING SERVICES
MONITORING SERVICES
Overview

Program monitoring data
• covering programs description
• published every working day up to noon
• part of TAM service

Spots
• basic information on advertising
• new categorization since 2016
• published twice a week
• part of TAM service

Ad Intel
• additional information on advertising
• preliminary data – delivered every day morning (no manual checks and adjustments)
• on-going update
• on-top service
AD SPEND MONITORING

Methodology overview

Automatic matching of pre-cut advertising norms via video-matching

Compare  Evaluate  Match
AD SPEND MONITORING
Methodology overview

Tree
- detailed classification
- precise description
- adjusted to market needs

Product Categorization
- five levels
- possibility to classify into each
- may be more than one product / brand / advertiser

Challenges
- no "universal" rule or model
- need to unified approach for all media types
## AD SPEND MONITORING
Top Advertisers TRPs 30, population 4+ (no TV-shops)

<table>
<thead>
<tr>
<th>Rank</th>
<th>III. quarter 2015</th>
<th>III. quarter 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PROCTER &amp; GAMBLE BULGARIA</td>
<td>↔ PROCTER &amp; GAMBLE BULGARIA</td>
</tr>
<tr>
<td>2</td>
<td>FICOSOTA</td>
<td>↑ NATURAL LOTTERY</td>
</tr>
<tr>
<td>3</td>
<td>ZAGORKA</td>
<td>↑ NATURPRODUKT</td>
</tr>
<tr>
<td>4</td>
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<td>↓ FICOSOTA</td>
</tr>
<tr>
<td>5</td>
<td>CARLSBERG BULGARIA</td>
<td>↑ LIDL BULGARIA</td>
</tr>
<tr>
<td>6</td>
<td>KAMENITZA</td>
<td>↑ COCA-COLA BULGARIA</td>
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<tr>
<td>7</td>
<td>HENKEL BULGARIA</td>
<td>↓ CARLSBERG BULGARIA</td>
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<tr>
<td>8</td>
<td>MOBILTEL</td>
<td>↑ RECKITT BENCKISER BULGARIA</td>
</tr>
<tr>
<td>9</td>
<td>NESTLE BULGARIA</td>
<td>↓ KAMENITZA</td>
</tr>
<tr>
<td>10</td>
<td>L'OREAL BULGARIA</td>
<td>↑ VIVACOM</td>
</tr>
</tbody>
</table>

Source: Nielsen Admosphere Bulgaria, Commercial Monitoring 3Q 2015, 3Q 2017
AD SPEND MONITORING
Examples of data usage – Top Advertisers TRPs 30, population 18-49 (no TV-shops)

<table>
<thead>
<tr>
<th></th>
<th>III. quarter 2015</th>
<th>III. quarter 2017</th>
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</thead>
<tbody>
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</tr>
</tbody>
</table>

Source: Nielsen Admosphere Bulgaria, Commercial Monitoring 3Q 2015, 3Q 2017
AGENDA

• What will be next?
WHAT WILL BE NEXT?
ENHANCEMENT OF TAM DATA

Measurement of guests

- **Standard part** of TAM measurements **globally** (in highly developed countries)

- Important piece of TAM
  - **able to substitute** or cover viewing of panel members that takes part **outside of home** (relatives, visits)

- 2 types of guests (easy to define)
  - **stable** (long-term, i.e. grandmother)
  - **temporary** (one-day, typical single visit), **automatically ends** with end of the day when he/she was defined

- Data processing for both types the same

- **Weight** for guests are **derived from average weights of household members**
  - for guest available demographic information (gender, age, size of residence site, region, signal reception)
ENHANCEMENT OF TAM DATA
Possibilities for media segmentation

• definition of different **media types users**
• based on media types time spent
  • non-consumers/extra light users
  • light users
  • middle users
  • heavy users
• radio, newspapers, magazines, internet – declaratory
• TV – according to time spent
ENHANCEMENT OF TAM DATA
Heavy and middle users by GENDER

<table>
<thead>
<tr>
<th>Medium</th>
<th>Male (Heavy)</th>
<th>Female (Heavy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Internet</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Radio</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Magazines</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>45%</td>
<td>55%</td>
</tr>
</tbody>
</table>
ENHANCEMENT OF TAM DATA

Heavy and middle users by AGE

- Age 15-24
- Age 25-34
- Age 35-44
- Age 45-54
- Age 55-64
- Age 65+

Newspapers
Magazines
Radio
Internet
Television
PROGRAM AND COMMERCIAL MONITORING
Product development

Thanks to Be Media / Be Admosphere

New production centre in Sliven

Solely under leadership of Nielsen Admosphere Bulgaria

Work-flow reorganization, processes development
PROGRAM AND COMMERCIAL MONITORING

TAM data

Part of TAM data delivery

PROGRAM MONITORING

- Daily Program Data – morning by 10 a.m.

SPOTS

- Commercial Data – twice per week – Friday, Wednesday afternoon at 4 p.m.
- Preliminary Monthly Commercial Data – first week of following month
- Final Monthly Commercial Data – one week after publishing monthly preliminary data
COMMERCIAL MONITORING
AD INTEL

Extended information

New timing for data delivery
• Daily Commercial Data – afternoon
• Preliminary Monthly Ad Intel Data – first week of following month
• Final Monthly Ad Intel Data – one week after publishing monthly preliminary data

Other media types

Print
• New methodology
• Comparable with TV
• 1Q 2018

Radio
• during 2018 continuing in discussions with market
DIGITAL ADVERTISING
New product Nielsen DAR

Significant increase in digital advertising

Main aim – reach the right people at the right time
not always successful
Importance of reliable measurement

Nielsen Digital Ad Ratings
a tool for this issue
independent measurement of digital campaigns
across all devices and platforms – PC and mobile devices (tablets and smartphones), browsers and apps
global solution – already in 30+ countries
DIGITAL ADVERTISING
New product Nielsen DAR

Transparent and accurate measurement of digital campaigns’ performance

reach | frequency | GRP | impressions | targeting

All devices
DIGITAL ADVERTISING
New product Nielsen DAR

Already in preparation for Bulgaria
Thanks to the first client – Nova/NetInfo Group – sooner than planned

Should be on market during 1Q 2018

Will cover inventory of web pages and apps represented by NetInfo
WHAT WILL BE NEXT?

SUMMARY

• Measurement of guests
• Media consumption segmentation

• Program and Commercials Monitoring (Spots)
• Ad Intel

• Nielsen DAR
AGENDA

• Tools
JAKUB VIDNER
Managing Director
Adwind Software
ADWIND KITE

WHAT YOU ALREADY HAVE
• Reach Curves
• Duplications & Conditional formatting

WHAT YOU WILL HAVE SOON (1Q 2018)
• Videoanalysis
• SimCross
• Guests & Media segmentation

WHAT WE CAN DO
• Nielsen SDK
• Survey

NEXT BIG THING
• Detailed planning
WHAT WILL BE NEXT?

SUMMARY

- Measurement of guests
- Media consumption segmentation

- Program and Commercials Monitoring (Spots)
- Ad Intel

- Nielsen DAR

- Adwind Kite
  - SimCross
  - Videoanalysis
  - Detailed planning
THANK YOU FOR YOUR ATTENTION!

Claire Harris
Commercial Leader
Nielsen
claire.harris@nielsen.com

Tereza Šimečková
Chairwoman
Nielsen Admosphere
tereza.simeckova@nielsen.com

Ivan Genchev
Managing Director
Nielsen Admophere Bulgaria
ivan.genchev@nielsen.com

Magida Sukkari
International Business Director
Nielsen Admosphere
magida.sukkari@nielsen.com

Jakub Vidner
Managing Director
Adwind Software
jakub.vidner@nielsen.com