



CIM Internet study

Methodology

Edition 2025



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Voorwoord

Deze 2025-editie van de CIM Internet-studie methodologie houdt rekening met alle wijzigingen die tot 31 december 2024 zijn aangebracht:

- de verbetering van de schatting van het bereik, ook wel real users genoemd, na het gebruik van first-party cookies ter vervanging van third-party cookies,
- het verbeteren van applicatie meting,
- verbetering van de meting van streaming (audio en video) in applicaties.

De berekening van de prestaties van digitale advertenties en crossmediaal bereik behoren tot onze doelstellingen en digitale meting zal zich blijven aanpassen aan de constante evolutie van browsers (naar een volledig cookie-loze wereld), beperkingen en oplossingen voor apparaat- en app-identificatie, media (fusie van tv en digitale platformen, ontwikkeling van digitale audio, ...), het gedrag van de Belgen (nieuwe manieren om media te consumeren, adoptie van nieuwe geconnecteerde apparaten, ...), technologie (data, artificiële intelligentie, machine learning), wetgeving, ...



Summary

Since 2014, the CIM works with Gemius for the CIM Internet study. This study measures the traffic and audiences of websites, players and apps.

Traffic

The CIM Internet traffic measurement is based on a 'site centric' approach, which requires media subscribers to the study to install a Gemius script on all pages of the sites, on their apps or their players that they want to be measured. When a subscriber has implemented the script, the institute (Gemius) will receive a hit each time a surfer visits a page or performs an action in a player or app. Gemius measures these page requests or actions and reports also visits, time and number of unique browsers. Traffic can be tracked on PC, laptop, smartphone, tablet and Connected TV.

Traffic data are published on a daily basis: page views, stream views and visits (sessions) for sites, apps and players are available to the public. The details are only available for the CIM subscribers.

Audience

The traffic measurement does not reveal who is behind a page request. To answer this question Gemius created a cookie panel: surfers on the participating websites receive an invitation to complete the CIM Internet study survey with questions on their socio-demographics and internet use. At the end of the survey a cookie is placed on the surfer's device and he becomes a panelist.

We distinguish 3 different panels depending on the device the panelist used to fill in the survey: PC (desktop + laptop), tablet and smartphone. There is a small overlap between those panels.

Within the PC panel, a distinction is made between the PC Work and the PC Home panel. Gemius typically measures only the home PC or only the work PC (but rarely both PC's). This means that for panelists that use a PC both at home and at work only 'half' of their internet activity is measured. To fill in the missing half, work PC data from another panelist are ascribed to a PC home panelist, or vice versa, home PC data from another panelist are ascribed to a PC work panelist. This newly made gross PC panel is then fused with the tablet and the smartphone panel, respecting duplications in device use known from the CIM Establishment Survey, to form the total cookie panel (+/- 100.000).

Finally, the total panel is weighted both on socio-demographics, as derived from the Golden Standard and Virtual Population (more information on [Golden Standard | CIM](#) in Dutch and on [Golden Standard | CIM](#) in French), and on surfing behavior, as derived from the census traffic data.

The audience results are published on a daily basis and made available to subscribers only in certified softwares ([Software leveranciers | CIM](#) and [Fournisseurs de logiciels | CIM](#)).



Introduction

Founded in 1971 from the merger of OFADI (first authentication agency for the distribution of press titles in Belgium) and CEBSP (first Belgian agency for audience measurement), the CIM is an association that aims to provide reference figures for the Belgian advertising market. The data collected by CIM are primarily intended for members who co-finance the studies. They come from three families: advertisers, intermediaries (mostly media agencies) and media. However, some results are also publicly available on the CIM website ([Digitaal | CIM](#) in Dutch and [Digital | CIM](#) in French).

CIM publishes internet traffic data for Belgian and Luxembourgian websites since 2000. The publication of Belgian internet audiences started in 2005. Since June 2014, the research partner for the CIM Internet study is Gemius.

As the digital world constantly evolves, the scope of the CIM Internet study has also evolved over time. The CIM Internet study currently consists of the following elements on PC/laptop, tablet, smartphones and connected TV

- Traffic measurement for content, at census level (= total universe, not sample or panel based)
 - o for websites on PC/laptop, tablet, smartphone and Connected TV
 - o for HTML5, native and hybrid apps on tablets, smartphone and Connected TV,
 - o for audio and video players on websites or in apps.
- Audience measurement for content, based on PC/laptop, tablet and smartphone cookie panels.

We are currently working on the development of

- Audience measurement for Connected TV apps,

A basic principle of the CIM Internet study is that the measurement may not harm the user experience. Therefore, scripts or any solution may not cause a visible delay and it is executed asynchronously to avoid blocking a page, app or player if something goes wrong in the measurement.



Stakeholders

CIM Internet Technical Committee

The Technical Committee Internet supervises the study. On 1/1/2025, it was composed as follows:

Chairman : Sébastien REPS (EssenceMediaCom)

Members :

Tom Overloop (DPG media)
Thierry Hottat (IPM)
Charlotte Van Der Stappen (Ads & Data)
Lauranne Van Cutsem (Mediafin)
Stéphanie Radochitzki (Mediabrand)
Philippe Deltenre (RTBF)
Corentin Franzin (MindShareWorld)
Joris De Ryck (Roularta)
Frank Neuckens (VRT)
Thibault Colassin (Publicis)
Mathieu Pieters (RTL)

CIM staff :

Koenraad Deridder (General Manager)
Robin Florin (Media Director)
Michaël Debels (Research Director)
Stephan Van Weddingen (TV & Digital Research)
Salomé Basch (Research Executive)

The CIM staff takes care of the relations with the subscribers and, together with the research institute, they monitor the correct implementation of all technical requirements.

The Research Institute

Since 1st of June 2014 Gemius is the research institute responsible for the data collection, analysis and modeling of results of the CIM Internet study. Gemius is specialized in internet measurement, and provides the currency study in several European countries (see www.gemius.com).

Subscribers

Subscribing CIM-members co-finance the study. Only these companies have access to the full results. They should handle the data with care and use them only within their normal commercial activities. The list of subscribers is updated on the CIM website: [Methodologie | CIM](#) in Dutch and [Méthodologie | CIM](#) in French.

Technical partners and software houses have no right to share data with third parties. Any company that wishes to subscribe to the CIM Internet study can obtain all necessary information on the website ([Souscrire | CIM](#) in French and [Inschrijven | CIM](#) in Dutch) or from the CIM staff (internet@cim.be).

Rules

Subscribers must follow a number of technical rules and publication conventions set by the Technical Commission and approved by the Board of CIM. The current version is available on the CIM site ([Reglementen | CIM](#) in Dutch and [Règlements | CIM](#) in French).

THE CIM INTERNET STUDY

1. Collecting population data

For the recruitment of the “cookie panel”, used to profile the traffic, the CIM Internet audience study that uses a continuous online survey. Recruitment is based on low frequency pop-ups that appear randomly (see section 4.1) on participating websites and invite the surfers to share sociodemographic data. Surfers that respond have selected themselves and self-selected samples are rarely representative (see also 4. Collecting profile and device usage data).

To know the real structure of the Belgian internet population, CIM has established an independent, representative, yearly study that monitors trends in possession and use of media equipment, and trends in media consumption for the total Belgian population. In the case of internet, as the survey collects information on the general surfing frequency, the device used for surfing or the usage frequency of online videos... This so called “Establishment Survey” consists of 6.000 interviews a year (50% face to face recruitment, 20% online panel recruitment via GfK and 30% online panel via CIM MediaWatch).

The data of the Establishment Survey are used to enrich the Virtual Population (VP, more information on [Golden Standard | CIM](#) in French or [Golden Standard | CIM](#) in Dutch). The VP of CIM is a huge database that represents >11 million residents in Belgium, not only according to their sociodemographic characteristics but also in terms of key variables on device usage and media behavior. It serves as a reference not only for the internet study, but also for the CIM TV and Radio studies.

VP data on usage of pc/laptop, tablet, smartphone and their duplications, as well as their socio-demographic profile, will allow later on in the data processing to combine home and work pc data for surfers that use both (see 5.3.2), to model the reach of devices but especially their duplication (see 5.3.3) and to correct sociodemographic recruitment biases of the online survey (see 5.3.4).



2. Collecting census traffic data

Scripting

The CIM Internet traffic measurement is based on a 'site centric' approach that requires the collaboration of the site, app and player owner to install the appropriate scripts and tags. All subscribing websites implement a small JavaScript tag into the source code of their website. Each time a webpage is requested by a browser, a call is sent to one of the measurement servers of Gemius. These servers retain the number of page requests and identify the browser.

When a user visits a website, the Gemius counting script is activated. If the user provides consent, the traffic recorded by the script will be accompanied by a first-party cookie stored in the browser on the device being used. The cookie is a small text file containing a unique numerical identifier. This identifier allows linking page requests and visits (an uninterrupted series of page requests by a single user on a single site).

This type of measurement is not perfect. In some cases, the cookie cannot be installed: several browsers do not accept cookies, the user can change his settings to block cookies by default, the user can delete his cookies occasionally, the user can apply his GDPR rights by refusing the use of cookies via the Consent Management Platform of a site. In such cases, a site centric measurement can correctly identify a page request but possibly not visits or a unique browser since the unique identification of the browser is unavailable. For the visits of the anonymous page views, since 2025, they are estimated based on the number of pages views with identifiers per visits.

Site-centric data alone does not provide any information about the socio-demographic profile of users. To deliver socio-demographic insights, it is necessary to leverage a panel that connects site-centric data with detailed socio-demographic attributes for a sample of users. This panel serves as the foundation for estimating the activities and behaviors of the entire measured audience.

Gemius uses proprietary BrowserID technology to identify cookie Panelists activities across different domains for the purposes of building the panel, on top of third party cookies. The BrowserID technology combines local storage identifiers and 3rd party cookies to identify returning browsers.

Since January 2020, Gemius uses 1st party cookie information to identify returning browsers on a given site, even when no 3rd party cookie information is available. Scripting of sites

2.1. Scripting of sites

The Gemius script for sites (HTML pages) is a JavaScript tracking script with a unique identifier per site (or site section) and several additional fields that can contain additional page-specific information that connects to the Gemius servers whenever a page request is made. The script is asynchronous: the response time of the Gemius servers will not affect the loading of the webpage itself. The script supports mobile and regular webpages, in HTTP and HTTPS, as well as applications built in HTML5 code.

```
<script type="text/javascript">
var pp_gemius_identifier = 'IDENTIFIER';

var pp_gemius_extraparameters = new Array('lan=EN', 'key=keyword',
'subs=subsection', 'free=free_field');

// lines below shouldn't be edited

function gemius_pending(i) { window[i] = window[i] || function() {var x =
window[i+'_pdata'] = window[i+'_pdata'] || [];
x[x.length]=Array.prototype.slice.call(arguments, 0);}};

(function(cmds) { var c; while(c = cmds.pop())
gemius_pending(c)})(['gemius_cmd',
'gemius_hit', 'gemius_event', 'gemius_init', 'pp_gemius_hit',
'pp_gemius_event', 'pp_gemius_init']);

window.pp_gemius_cmd = window.pp_gemius_cmd || window.gemius_cmd;

(function(d,t) {try {var
gt=d.createElement(t),s=d.getElementsByTagName(t)[0],l=
'http'+((location.protocol=='https:')?'s':'');
gt.setAttribute('async','async'); gt.setAttribute('defer','defer');
gt.src=l+'://gabe.hit.gemius.pl/xgemius.min.js';
s.parentNode.insertBefore(gt,s);} catch (e) {}})(document,'script');

</script>
```

Besides the unique identifier, 4 other parameters are available to describe the content of the webpage:

1. **Lan** = Language. Possible values: FR, NL, EN, GE, LU, OTHER.

Only the language parameter is mandatory.

Key = Keyword: value to describe the content of the page. Specification of the information in the section. A keyword is used:

- To include additional info on site structure that can't be derived from the section only.
E.g.: Section sports – Keyword: Tour de France
- To recreate commercial packages.

The number of different keywords is limited to 200 per site or section.

2. **Subs** = Subsection: free field for subscribers who wish to add more detailed info on their website structure.
3. **Free** = a free field to be used for whatever information the subscriber wants to collect.



Data on language and keyword are reported to the market in all Gemius tools.

Subsection and the free parameter are only available for internal analysis by a subscriber in Prism (see 3.3).

Moreover, the participating sites must add in the script the appropriate parameters (according to the instructions) in order to respect surfer's consent. Those parameters allow the script to send the first page request only once the user has accepted or refused the usage of Gemius cookies. After that, the script is able to make page requests with or without cookies according to the consent previously given.

Participating sites must also implement the CIM Internet logo with a hyperlink to the disclaimer of the study.

More information on the measurement script and the correct tagging of a website is available for subscribers with the appropriate password on the CIM Sharepoint : [CIM Internet – Scripting documentation for sites](#).

Each site that enters the study is controlled by Gemius and by CIM staff who checks if the tagging is implemented correctly according to the CIM Internet rules.

2.2. Scripting of dynamic webpages (HTML5, AJAX or Flash)

A special version of the script is available for measuring the pages on sites that uses HTML5, AJAX or Flash technology. Documentation is available upon request by email to the CIM : internet@cim.be.

2.3. Scripting of webview, hybrid and native applications

Webview (HTML5) apps are scripted with the regular page scripting technology (see 2.1.1). In order for the measured traffic to be identified as coming from an app, the UserAgent must be adjusted according to the instructions.

Native apps are scripted with Gemius SDK ("Software Development Kit"). Two different SDKs are available: one for iOS and one for Android. Subscribers can tag sections in their apps by using an extraparameter ('sectionID').

Hybrid apps are tagged with a combination of the scripting technology and SDKs mentioned above.

All apps are tagged with a unique identifier per app.

All tagging instructions and recommendations are available for subscribers with the appropriate password on the CIM Sharepoint : [CIM Internet - Scripting documentation for apps](#).

2.4. Scripting of streams in sites

The CIM streaming traffic measurement is also 'site centric', meaning that the owner should install measurement codes in the player (and eventually in the streams to identify the content).

All subscribed players embedded in websites are required to implement a JavaScript tag into the source code of their website. Each time a player is started, paused, forwarded, rewind or stopped by the surfer, a call is sent to the Gemius servers. They will retain each player action and identify the browser.

The player tag uses the same 1st party cookie as the web page tags.

The tagging of audio and video players is done at the level of the player, not the website or the app it is played in. A player can therefore be used on different websites, even non-participating websites, and still be measured.

Tagging a player also requires an identifier that is unique for each player. The same identifier can be used for a player on the subscribers' own websites and on third party websites, and for both streaming in a browser and streaming in an application.

Since September 2019, Belgian broadcasters add a unique code (called TV-Link) to their video streams, similar to the codes they use in the classic TAM TV study. This allows to identify content that has been shown on both on linear TV and online. For live streams, the broadcasters also have to respect the official list of CIM Channel values in their tagging.

The streaming documentation is available for subscribers with the appropriate password on the CIM Sharepoint : [CIM Internet - Scripting documentation for players](#).

```

1 <script type="text/javascript">
2 function gemius_player_pending(obj,fun) {obj[fun] = obj[fun] || function() {var x =
3 window['gemius_player_data'] = window['gemius_player_data'] || [];
4 x[x.length]=[this,fun,arguments];}};
5 gemius_player_pending(window,"GemiusPlayer");
6 gemius_player_pending(GemiusPlayer.prototype,"newProgram");
7 gemius_player_pending(GemiusPlayer.prototype,"newAd");
8 gemius_player_pending(GemiusPlayer.prototype,"adEvent");
9 gemius_player_pending(GemiusPlayer.prototype,"programEvent");
10 gemius_player_pending(GemiusPlayer.prototype,"setVideoObject");
11 (function(d,t) {try {var gt=d.createElement(t),s=d.getElementsByTagName(t)[0],
12 l='http'+((location.protocol=='https:')?'s':''); gt.setAttribute('async','async');
13 gt.setAttribute('defer','defer'); gt.src=l+'//gabe.hit.gemius.pl/gplayer.js';
14 s.parentNode.insertBefore(gt,s);} catch (e) {}})(document,'script');
15 </script>
16
17

```



2.5. Scripting of streams in application

Since August 2016, the installation of stream tagging within an native or hybrid app can be done by using a Software Development Kit (SDK). The documentation for Android and iOS apps is available for subscribers with the appropriate password on the CIM Sharepoint : [CIM Internet - Scripting documentation for players](#).

The unique identifier to use is the same as for streams in sites.

3. Traffic publication

Traffic results of the site centric measurement are published in different reports and software tools.

3.1. Metrics

The CIM Internet traffic measurement offers a broad range of results. Software tools have a manual that explain the available metrics. A list of metric definitions is also available in the rules of the CIM Internet study. The following short overview offers the most commonly used metrics.

- Page View:
A file, or combination of files, sent to a unique browser after a request of this unique browser was received through the server of the site.
Warning: Gemius uses the term 'Page Views' in its reporting tools instead of 'Page Requests'.
- Stream view:
Each time that an audio or video stream is started, either by a user action or by autoplay.
- Visit (or Session):
A consecutive series of Page Requests generated within one browser on a given domain (site). The time between two consecutive page requests cannot exceed thirty minutes.
- UB (Unique Browser): a browser identified on the basis of a unique Top First Party Cookie
- Unique Application (UA): an app identified on the basis of a AppVisitorID (unique combination of Advertising ID or VendorID).
- Real Users: an estimate of the number of people based on Gemius methodology.
For more details, please read the chapter 5.2.2.

More internet terms or expressions can be found on the CIM website in the glossary:

- French: [Glossaire | CIM](#)
- Dutch: [Woordenlijst | CIM](#)

and in the Internet Rules

- French: [Règlements | CIM](#)
- Dutch: [Reglementen | CIM](#)

3.2. Public results

The CIM publishes limited traffic results on its website ([Digital | CIM](#) in French and [Digitaal | CIM](#) in Dutch) :

- For Belgian websites, apps and players Page/Stream impressions and visits (sessions) are available. These results are provided in the online tool eGemius (<https://e.gemius.com>), which is placed in an I-frame on the CIM site.
- For Luxembourg websites and apps impressions and visits (sessions) are available. These results are provided in the online tool eGemius (<https://e.gemius.com>), which is placed in an I-frame on the CIM site.

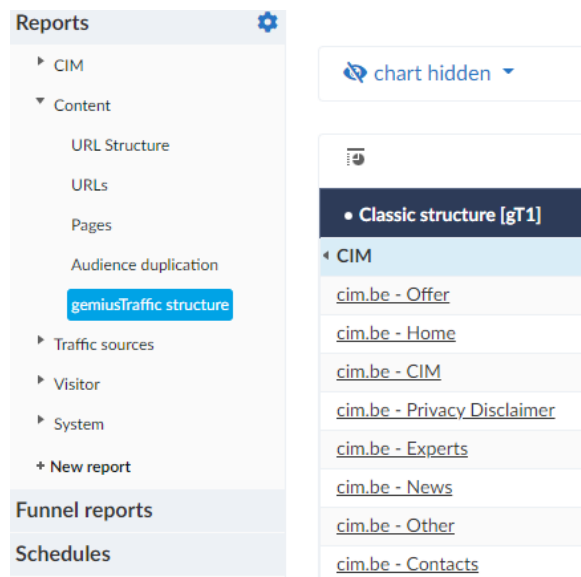
The technical information (on browsers, devices, OS, etc.) are aggregated and displayed on ranking.gemius.com. Belgian results are available via be.ranking.gemius.com and Luxembourg results are available via lu.ranking.gemius.com.

3.3. Prism

Prism is an online web analytics tool for subscribers that gives access to raw traffic data for the owners of the sites, apps and players only (no access to raw data from competitors). Only traffic created by bots is filtered out.

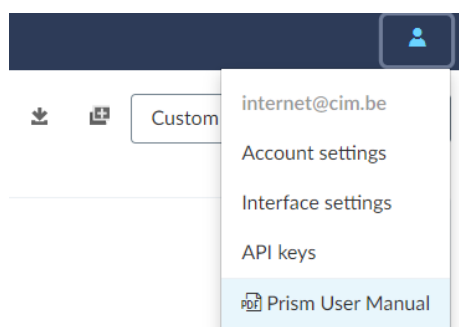
The tool reports near real-time traffic data for participating sites, apps and players (maximum 2 hours delay), allowing publishers to review their tagging, compare it to internal data or improve their website, players or apps. Prism data is no CIM currency data. Prism results are for internal use only: no external communication of Prism data is allowed.

Traffic by section (if defined) can be analyzed with a standard report “Content > gemiusTraffic structure”.



An additional set of metrics is available for streaming projects, e.g. Stream views, Streaming time, Streaming time / visitor, Stream views / visitor, Streaming visitors... Within stream views, there is a distinction available between net, gross and spot views in order to measure ad rolls.

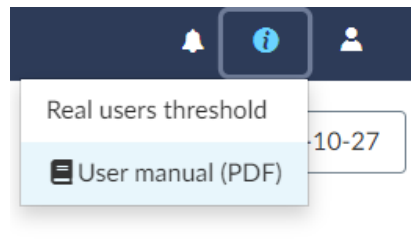
A general manual on how to use Prism is available directly in the tool :



3.4. eGemius

As of April 2, 2020, eGemius (e.gemius.com) is the webtool that offers both traffic and audience currency data for all published sites, apps and players.

A general manual on how to use eGemius is available directly in the tool :



4. Collecting audience data

The CIM traffic measurement counts page requests within browsers, actions in apps, views in video and audio players within the total surfer population... Unfortunately, this doesn't tell anything about gender, age or other socio-demographic characteristics of the surfer behind the browser, app or player. Yet, these audience data are essential in media planning.

This is precisely the reason why many internet audience studies, including CIM Internet, continuously collect profile data. Surfers are invited by low frequency pop-ups, that appear randomly (see section 4.1) on participating websites, to answer a limited number of questions on their devices, their internet usage and profile. The response rate is low but there are a lot of surfers out there. So the problem is not so much the limited number of respondents but rather the unrepresentative self-selection.

As a result, the CIM Internet audience study is fundamentally different from other audience currency studies. The TV TAM study is based on a small but strictly controlled panel. The Radio, Press and Cinema studies are based on a larger, fairly controlled sample of individuals. In these methods, a 'simple' extrapolation to the general population (the universe) is sufficient to calculate profiled audiences.

The CIM Internet study uses another approach. By inviting surfers to profile themselves, we have profiled traffic from the browser and device the surfers used to fill in the pop-up questionnaire: as long as the identifier (cookie or BID...) used while responding to the questionnaire is kept, we collect surfing behavior from a profiled panelist on one device. In fact, Gemius has built over time three panels:

- a PC/laptop panel (split up into a 'home' and a 'work' section),
- a tablet panel,
- a smartphone panel.

The questionnaire used on mobile devices is slightly different than the questionnaire on pc's. Young people between 12 and 17 years receive a shortened version. All questionnaires can be consulted in the annexes of this document.

The advantage of this approach is two-fold:

- There is an observed (not a declared) relationship between socio-demographic data and browsing behavior.
- A panelist answers to the questionnaire responding to a popup on site A, but his profiles is applicable to all other sites he visits (in browsers that supports Third Party Cookies). This is an advantage for smaller sites that could never collect sufficient pop-up data on their own.

What is more, since JAR implementation (January 1st 2025) Cookie Panel is supported by data from First Party browsers such as Edge and Firefox, where Cookie Matching (CM) solution is implemented. More details about methodology you can find in the supplementary document.

4.1 Recruitment

Surfers are invited to participate in the CIM Internet study through pop-up invitations shown on the participating websites. By responding to this request, they join the CIM Internet PC cookie panel, the CIM Internet Tablet cookie panel or the CIM Internet Smartphone cookie panel depending on the device they use to answer the questions.

The pop-ups follow a pseudorandomized pattern based on an algorithm that uses the following rules:

- Each day a subset of the Gemius cookie database is selected. This subset is maximum 45% of the entire cookie database.
- From this subset the invitation is only shown for cookies that meet several conditions:
 - The cookie or BrowserID must be at least 7 days old, to prevent surfers that delete their cookies regularly to become part of the panel.
 - If the cookie was already invited to participate without success, it will no longer be invited in the same timeslot (08:00 – 11:59, 12:00 – 14:59, 15:00 – 18:59, 19:00 – 21:59, 22:00 – 07:59).
 - In total, a given cookie cannot receive more than 2 invitations.
 - All subscribed websites participate. They don't control the odds of sending out an invitation.
 - The recruitment is continuous over all months of the year.
 - Only sites with children under 12 years as main target group can be excluded from the recruitment.
 - The CIM Internet Technical Committee can decide to temporarily raise the odds on specific websites that are selective on difficult to recruit profiles (e.g. to recruit young surfers on French websites).

There are three versions of the online questionnaire (see Annex 1):

- the standard PC/laptop questionnaire,
- a somewhat shortened version for Tablet and Smartphone,
- a version for 12-17 year old respondents without questions on main responsible for revenues, number and age of children, grandchildren...

Exceptionally, special recruitment actions are undertaken to recruit 12-17 or 18-24 year olds that are traditionally underrepresented (esp. on the French speaking side): a mailing to panel members with 12-17 year old children in the households, a short Facebook campaign.

4.2 Validation rules

In an online survey, inconsistencies should be easily prevented. E.g. if a person lives on his own, the question "main responsible for the income (MRI)" will not be asked but automatically set to 'Yes'. However, some inconsistencies remain possible. Depending on the inconsistencies, cases are excluded or corrected according to the validation rules hereunder.

There are additional validation rules: one set for the PC cookie panel, a shorter one for mobile panels as shown in the following table.

Validation rules for the PC/laptop panel and for the smartphone and tablet panels

	PC/Laptop	Tablet and smartphone
younger than 15 years old and no parental permission (STOP INTERVIEW)	X	X
age below 12 (STOP INTERVIEW)	X	X
age above 99	X	X
lives outside Belgium (STOP INTERVIEW)	X	X
wrong postal code	X	X
internet usage less often than once a month	X	X
fills in the questionnaire on device other than PC or laptop	X	
is not the main user of the PC/Laptop and doesn't have their own profile	X	
share profile on desktop computer	X	
share profile on portable computer	X	
fills in the questionnaire in a public place on desktop computer	X	
device other than tablet or smartphone		X
this tablet usage to visit internet websites less once a month		X
this smartphone usage to visit internet websites less once a month		X
respondent is not the main user of this tablet		X
respondent is not the main user of this smartphone		X
age below 15 and not a student	X	X
age below 20 and member of the general management	X	X
age below 30 and pensioner or retired	X	X
not working but declares filling in the questionnaire at work	X	
age below 18 and is a main income bringer	X	X
age below 20 and has a higher (bachelor education (or higher)	X	X
age below 22 and has an master education (or higher)	X	X

4.3 Panel size

The table below shows panel sizes from December 2020 to December 2024 both for PC and Mobile panels.

	PC/Laptop	Tablet/Smartphone	Total
2020.12	39.947	29.681	67.628
2021.12	34.248	25.812	60.060
2022.12	46.180	30.858	77.038
2023.12	49.839	34.433	84.272
2024.12	49.741	50.091	99.832

5. Audience modelling

5.1 Methodological challenges

Cookies serve as a fundamental metric for representing internet users; however, relying on them directly and simply counting cookies is not feasible. This is due to the inherent characteristics of cookies, such as their ability to be deleted or blocked, which prevents a one-to-one representation of individual users. Despite these limitations, cookies can still provide a solid foundation for user estimation when carefully selected. Gemius' methodology addresses this challenge by first estimating site-centric Real Users based on a refined selection of cookies, ensuring a more accurate and reliable representation of online audiences. Assuming that a solution is found for the different challenges discussed hereafter!

5.1.1. The multi-cookie problem

Surfers who regularly delete their cookies are registered with several consecutive cookies. Using the incognito/private mode also has a role in the multi-cookie problems, as the user sent another cookie for each visit on a website. To avoid overestimation of Real Users, Gemius invented method to determine site-centric Real Users called Browsers Number (BN). The core of the method is to determine representative cookies and extrapolate their site-centric behavior (number of PVs generated by one representative cookie) over whole registered traffic.

5.1.2. The missing cookie problem

When users refuse cookies upon visiting a website, no first-party cookies are stored. This means we can only collect raw, unassigned metrics that are not linked to any specific cookie. As a result, it becomes challenging to estimate user activity across different websites. To address this issue, the Browser Number estimation method will be used to account for such traffic.

5.1.3. The multi-browser problem

Surfers can use more than one browser on a certain device and multiple users can use the same browser on the same device. This is corrected by estimating the so-called J BRUS coefficient (see below 5.2.2).

5.1.4. The multi-devices/user problem

Surfers can use the internet on more than one device, e.g. a desktop at work, and a laptop at home. On the other hand, several people can use the same device. This is also corrected by estimating the J BRUS coefficient (see below 5.2.2).

Since 2016, a fusion of the home and work consumption for panel members declaring to surf both at home and at work/school, solved this problem (see below 5.3.3).

5.1.5. First Party Cookies characteristics

With the introduction of the JAR methodology (effective from 01.01.2025), site-centric RU (BN) calculations rely exclusively on first-party cookies. Since first-party cookies are not shared across domains, proper deduplication is required to accurately determine Real Users for a given group (encompassing multiple domains) or an Internet node. This presents an additional challenge addressed by the Browser Number method. More about BN method in 5.2.2 chapter.

5.2. Calculating the daily internet population

The collected population data from the virtual population (see 1. Collecting population data) gives an estimate of the total number and profile of surfers on different devices for an average month. The total number of real people surfing on the internet, however, will vary from day to day. The first question is therefore whether variations in observed traffic, may serve to estimate the varying number of surfers per day?

Gemius refers to surfers as 'Real Users', more specifically defined as the number of internet users who visited at least one of the participating websites within the last 28 days. Real Users are published in eGemius and the planning softwares. In the Gemius' methodology, the number of Real Users per day is estimated in several steps.

5.2.1. Real Users vs. Browsers

In all likelihood, the number of Real Users of a website will not be the same as the number of browsers used to visit that site. Browsers are therefore no reliable estimate of Real Users. That's why Gemius developed a dedicated algorithm to estimate Real Users.

5.2.2. The Real User algorithm ; site-centric RU estimations

The 1st step in the algorithm is the evaluation of the site-centric number of Browsers that access the Internet. “Browsers Number” (BN) is a set of methods calculating the site-centric estimate of the number of browsers (up to now called EC) for domains, groups, and the audited internet node, without any use of Third-Party Cookies (TPC). Methods within BN are designed and optimized for a few dimensions: two regarding time – day and 28-day period (or, if needed, another period from the range of 2 to 31 days); and two regarding the object of interest – a single domain and multiple domains.

4 dimensions are needed due different challenges concerning cookies dependently on period (in longer period cookies are more prone to being deleted) and object of interest (First Party Cookies are not deduplicated between different domains).

Browsers Number method is described in details in supplementary document.

The 2nd step in the algorithm is the estimate of number of **Real Users** behind the Real Browsers.

To estimate the number of Real Users, we would need to know the average number of users per unique browser over all sites (the so called J-factor). This value can be derived from the number of Real Browsers for all sites combined, the number of surfers in the population as reported by the Virtual Population and the size of the node in question: $J_{BRUS}(BN(n)) = (J_{str} - 1) \left(\frac{BN(n)}{BN(I)} \right) + 1$, with $J_{str} = \frac{Real\ Users_{Internet}}{BN_{Internet}}$. For big nodes $J_{node} \rightarrow J_{Internet}$, for small nodes $J_{node} \rightarrow 1$. $J_{Internet}$ is established for each device type independently.

By multiplying the number of estimated browsers counted on a particular website by this J-factor, we get the site-centric number of **Real Users** for this particular website: $RU_{Site} = BN_{Site} * J_{Site}$.

Since the 1st January of 2025, CIM introduces the JAR method, which has a major impact on the Real Users estimations.

For the **websites**, the JAR brings 3 effects on the Real Users, especially within change of method on determining site-centric Real Users. The new method, Browsers Number is described in details in supplementary document. Below you can find the simplified description of its effect on Real Users numbers.

1. Estimated Cookie Standard (EC Standard), the main impact on the metric

With the adaption of the formula, we use the proportion of the total page view of the site to its “good” page views. With this new formula, the level of consent and the Safari share are better reflected, as we focus on the traffic of the website only.

$$BN_{site} = good\ cookies_{site} * \frac{total\ page\ views_{site}}{good\ page\ views_{site}}$$

For the **players in domain**, EC Standard as the same impact on the RU.

In other words, the websites are now more resistant to the level of consent.

2. JAR Effect

In this method, only the first party cookies will be taken into account in the RU estimations. This allows us to be resistant to future Third Party limitations (Google announcements on privacy) and to consider 2 new browsers: Edge and Firefox.

3. Estimated Visits Effect

The visits are now reflecting the entire traffic, anonymous and non-anonymous. This has a slight impact on the RU metric.

For the **apps**, the Real Users use a new identifier, the AppVisitorID which combines the AdvertisingID and VendorID. Thanks to this, iOS traffic will be better estimated, as the AdvertisingID is rarely available on this Operating System.

Concerning the **player in apps**: with more identifiers, the audience will be better estimated as well. The major impact of the JAR is the estimation of the audience behind the anonymous traffic.

Beside of the Real Users, this JAR system impacts other metrics:

- Visits: estimated visits of anonymous traffic are now added in the results of this metric.
- Unique Applications: Now based on another identifier, AppVisitorID. This prevent the issue of cookie deletion that could overestimate apps with an issue of scripting.
- Unique Browser: Corrected in the new method by using the First Party Cookies, Unique Browsers might be subject to a decrease compared to the previous method.

With the introduction of JAR, comparison between the previous results and the JAR results are not relevant.

5.3. Calculating daily audience results

Site-centric data alone does not provide any information about the socio-demographic profile of users. To deliver socio-demographic insights, it is necessary to leverage a panel that connects site-centric data with detailed socio-demographic attributes for a sample of users. The further steps described in that chapter, concern merge of site-centric data with Cookie Panel data (site-centric Real Users is target for that merge).

5.3.1. The Constant Panel

Starting the 1st of April 2020, audience results are produced daily for the Constant Panel. The Constant Panel is a virtual representation of the Belgian population with a limited size (+/- 120.000 records), not to be confound with the large Virtual Population of CIM (>11Mio records).

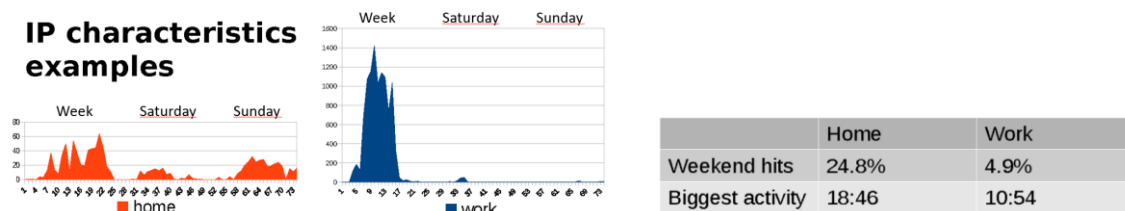
All records in the Constant Panel have the same weight. This weight is therefore the extrapolation factor used to calculate audiences for the total Belgian population. Each record receives socio-demographic and behavioural characteristics (like surfing or not; surfing the last 30d ...). Each day, the surfing behaviour observed in the pc, tablet and smartphone panels is ascribed to the virtual Constant Panel, respecting the duplication between devices and as much as possible the history of ascriptions (= any given virtual individual will receive as much as possible the observed behaviour of the same real panelist). Given the daily variation in internet population (see 5.2.), the status of individuals in the Constant Panel may vary between days from active to inactive surfers as in real life.

Before this daily ascription process is executed, however, a list of preliminary processing steps has to be performed.

5.3.2 PC Home and PC Work ascription

In the PC/laptop panel, we have observations from home computers and from work computers, but (almost) no combined results from surfers that use both. Gemius therefore models the combined usage.

First, all PC page requests are classified as either PC Home page requests or PC Work page requests based on an IP classification model that takes the usage pattern of computers into account, e.g.



This model allows to:

- correctly classify 98% of the Home IPs to 'Home',
- correctly classify 83% of the Work/School IPs to 'Work'.

As there are more home IPs than work IPs, the model overall correctly classifies 94% of IPs. The Home-Work distribution by website will be used to calibrate the fusion of the PC panel data.

Secondly, PC Panel data will be split into PC Home and PC Work data based on the answers to the question *"How often have you used internet in the past month on each of the following places?"*

- At Home
- At work
- At school or at university
- Mobile (on the street, underway or at public places)
- Elsewhere

(1. Never, 2. Less than 3 days a week, 3. 4-6 days a week, 4. 7 days a week)

In a third step, home pc's and work pc's (as identified in the pop-up questionnaire) will be combined and weighted to represent subgroups within the PC surfer population as it is known from CIM's VP:

- Exclusively PC at home surfers (they will not be fused),
- Exclusively PC at work surfers (they will not be fused),
- PC Home panel members, declaring using both, that will be receivers of PC Work data,
- PC Work panel members, declaring using both, that will be donors for PC Home panelists,
- Surfers that are part both of the Home PC and the Work PC pane (the calibration panel).

5.3.3 Fusing devices with BPS

Having separate surfing and profile data from PC/laptop, tablet and smartphone panel, does not allow to represent the behavior of surfers that use multiple devices.

- Luckily, respondents to the Gemius pop-up questionnaire indicate what type of devices they use to surf. So we know which part their online activity is missing.
- A small number of respondents fill in the questionnaire on several devices (spontaneously or after an invitation by mail), constituting a small calibration panel.
- Furthermore, we know the duplication between devices at the population level from CIM's Virtual Population.

This combination of "known incomplete" panel data with structural population data allows Gemius to fuse data from their 3 panels into a representative image of the population of single, dual, triple or more device users. This methodology is called the "Behavioral Panel Synthesis" (BPS) methodology.

The BPS algorithm consists in essence of four steps:

- a. Metrical Clustering
- b. Behavioral Distance
- c. Nearest Neighbor Merging
- d. Weighting

Each step is described shortly hereafter.

a. Metrical Clustering

First, each panel is clustered into subsets of similar users based on the socio-demographic variables gender, age and language and the devices they use. Only panelists from within one cluster will be merged. In other words, two significantly different panelists from different clusters will never be merged (e.g. a man with a woman, or a Dutch speaking with a French speaking). Panelists who use only one device, are excluded from the fusion process.

b. Behavioral Distance

There is a great variety of behavioral patterns (surfing) within a single cluster. To avoid merging significantly differing panelists, a probabilistic model is used whereby the distance between all the individuals is calculated. That distance is based upon their socio-demos as well as on their surfing behavior. This distance reflects the probability of being the same person for two panelists on different devices. This allows to merge only those panelists whose behavior indicates that they are likely to be the same person. In practice, this principle is build up as follows:

- To build such a model a Calibration Panel is required. It provides information about the internet usage of panelists across different devices. In February 2020 the calibration panel was composed of 468 panelists out of which 360 were enlisted in the PC and Smartphone panel, 70 in the PC and Tablet panel and 38 in the Smartphone and Tablet panel.
- Within the calibration panel, it is known for all panelists which websites he visited on all his devices within the analyzed period. This allows to establish for each calibration panelist positive connections between devices (websites visited by the same person on both devices) and false connections (websites visited on only one device).
- The pattern of connections (0 or 1) observed in the calibration panel, will be used to calculate the distance between calibration panelists that use different devices to see who are the best candidates for merging. This creates for each combination of devices a model of good and bad fits based on a logistical regression. The model is “self-training”. From month to month the algorithm builds upon the acquired information.
- Finally, the model will be applied to the appropriate combination of devices within a given cluster (e.g. Dutch Male 18-24). For each possible combination of panelists with one device with all panelists from another device a distance coefficient is calculated.

c. Nearest Neighbor Merging

Within each cluster (e.g. Dutch Male 18-24) we merge panelists from different platforms as follows:

1. PC * Smartphone:
 - For any PC panelist, the probability is calculated of being the same person as each Smartphone panelist.
 - The Smartphone panelist with the highest probability is merged with the given PC panelist and the Smartphone panelist was not already merged with too many PC panelists). The merged panelist keeps the sociodemos of the PC panelist.
 - If there is no such Smartphone panelist, then the given PC panelist is not merged with any Smartphone panelist.
2. PC * Tablet:
 - Procedure 1 is repeated with Tablet panelists, instead of Smartphone panelists.
 - The merged panelist keeps the sociodemos of the PC panelist.
3. Smartphone * Tablet:
 - Procedure 1 is repeated with Tablet and Smartphone panelists.
 - The merged panelist keeps the Phone sociodemographics.

These three processes are set to produce the required number of device combinations according to CIM's VP. This process results in a cross-device panel in which the full surfing activity on all devices is modelled for each panelist.

d. Weighting

The last step of the BPS approach is the daily RIM weighting procedure that takes into account:

- The sociodemographic profile of users for each platform and for total internet.
- The device structure and profile, i.e. # of users and sociodemographic profile per device combination (e.g. PC only, PC + Mobile, PC + Smartphone...).
- The number of Real Users for each website on each platform.

1. Sociodemographic profile

Surfers in the constant panel are weighted to represent all surfers residing in Belgium, who were active during the last 30 days, following this weighting matrix:

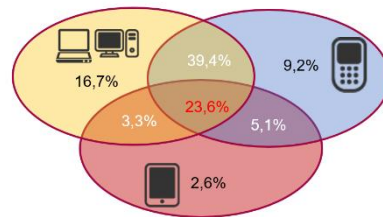
- Language (2)
- Gender(2) * Language(2)
- Age(6) * Language(2)
- Age(6) * Gender(2)
- Education (6)
- Education (2) * Language(2)
- Occupation (11)
- Activity(2) * Language(2)
- Nielsen (8)
- Province(11) * Gender(2)

Weighting objectives are updated once a year based on CIM's VP (1st of January)

2. Device structure and profile

The usage of different devices, and their duplication, is derived from CIM's VP. The table and graph below show the weighting objectives on the 1st of January 2024.

Internet population by device	
Total population	10.183.674
Total surfers last 30 days	9.318.337
PC	7.602.674
Tablet	2.853.571
Smartphone	8.333.587

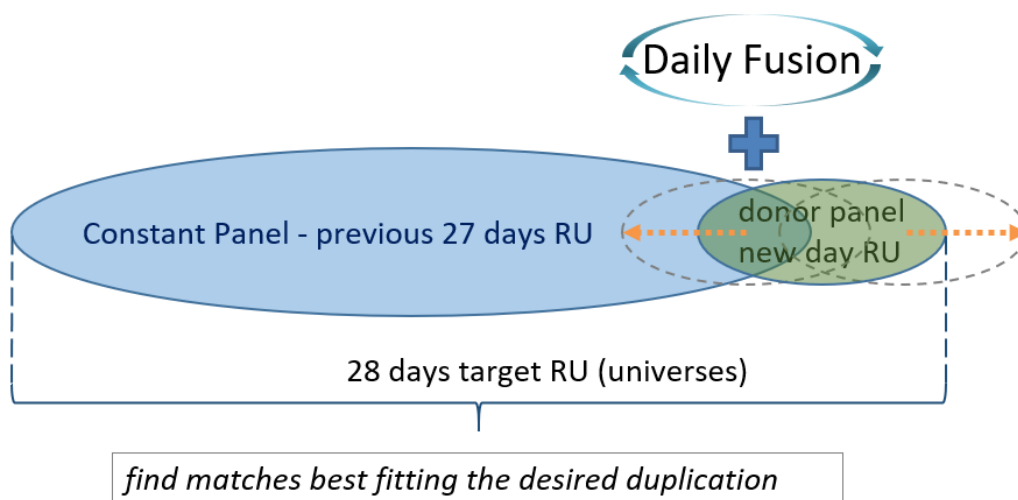


3. Real Users per website * device.

The total modelling process should reproduce the expected number of Real Users by site * device as established in 5.2.2. In other words, the sum of weights of all the panelists that visited a particular website should be equal to the expected number of Real Users.

5.3.4 Daily Fusion

Daily Fusion is a core step allowing to combine independent daily files with Constant Panel, where each virtual panelist has his own browsing history represented over time. The priority here is not to simply pair the most socio-demographically and behaviorally similar panelists (no seek for look-alikes). The goal is to keep socio-demographical clusters (to assure adequate demographical profiles), but inside of them, pair panelists in such a way, that it minimizes Real Users error compared to site-centric measurement. So now, Daily Fusion is responsible for long-term error reduction instead of weighting.



5.3.5 Calibration to census traffic data

The best modelling and weighting procedure will never produce traffic results that match perfectly the census traffic results. As it would be annoying to have slightly different traffic results according to the source and tool, the modelled traffic results are calibrated to match census traffic data at the level of page requests, visits and time.

6. Audience publication

6.1. Publication conditions

In principle, each Belgian website, app or player that participates in the CIM Internet study will automatically receive both traffic and audience data, as long as it is correctly tagged.

The results from publications units for which the number of Real Users stay below 0,3% of the population are marked in grey.

6.2. Access to the results

The audience results of the CIM Internet study are only available to subscribers. They can be consulted in 2 different formats:

- eGemius
- Media planning tools.

The list of current software suppliers certified by the CIM is available on the CIM website:

FR: [Fournisseurs de logiciels | CIM](#)

NL: [Software leveranciers | CIM](#)

6.2.1. The eGemius reporting tool

[eGemius](#) is an online tool launched in April 2020 and available only to subscribers of the CIM Internet study. The tool contains both traffic and audience data for sites, apps and players (and traffic only for cTV). Since the introduction of the Constant Panel (see 5.3.1), the user can calculate the reach accumulation for any freely selected period. Annex 2 shows the list of available socio demographics.

6.2.2. Media planning tools

Since the introduction of the Constant Panel (see 5.3.1), software houses receive daily planning files. These files contain the same information as eGemius. Planning tools can produce crosstabs (as does eGemius) but also allow to plan and simulate digital advertising campaigns.

7. Controlling the CIM Internet study

Each aspect of the CIM Internet study is thoroughly tested by the research institute Gemius as well as by the CIM and the software house (GfK).

7.1. Checking traffic data

The tagging of each new website/section/player/app is thoroughly tested before allowing it into the study. The tagging of a random selection of websites, players and apps is continuously checked, e.g.:

- Is the scripting correctly implemented?
- Is the scripting available on the entire website/app?
- Is the correct identifier being used?
- Is the mandatory extraparameter 'Language' included?
- Are the CIM logo and disclaimer available on the website/app?

Every day, the CIM Internet staff checks the results for Belgium and Luxembourg in eGemius or gemiusPrism. The checks focus on the availability and stability of the results. If a problem is found, the subscriber is contacted and asked to take the necessary measures.

7.2. Checking audience data

Before delivering the data to CIM, Gemius does a series of internal checks on the audience data:

- Checking for abnormal volumes of filtered out page requests (based on rules for allowed domains, autorefresh or use of iFrame),
- Monthly trend reports on validation rules at panel intake (e.g. how many respondents lost due to conflicting answers in the intake survey?)
- Monthly stability check on % of not-good BID
- Check size of 3 panels and compare with population trends (e.g. increase smartphone...)
- Check on the socio-demographical structure of the panel versus the data known CIM's VP
- Check on weighting efficiency and weights distribution (average, min., max. weight)
- Monthly trend reports for Total Internet (e.g. Estimated Cookies, Population, J coefficient)
- Monthly trend report on all websites (e.g. changes in PVs, RUs, panelists)

The Permanent Structure of CIM controls the following:

- Check for gaps in traffic data.
- Monthly overview ins and outs (site, section, app, player and networks) for software houses.
- Comparison with CIM's VP of the published results on weighted and unweighted variables for PC, Smartphone and Tablet audiences
- Check on stability of reach results for all websites x devices

On a monthly basis the audience data are controlled and reported to the CIM Internet technical committee. Reports are presented on the panel size, the recruitment rate, the socio-demographic composition of the panel, the efficiency of the weighting ...

8. Annexes

8.1 Annex 1. Intake surveys.

CIM Internet PC Cookie Panel questionnaire for adults (18+)

Age and place of living			
Q0	year (1900 TO current year - 12)	What is your year of birth?	----
Q11A		Do you live in Belgium?	1: Yes 2: No
		What province do you live in?	1: Antwerp 2: Brussels 3: Hainaut 4: Limburg 5: Liège 6: Luxembourg 7: Namur 8: East-Flanders 9: Flemish Brabant 10: Walloon Brabant 11: West-Flanders
Q11B	numeric	What is your zip code?	----
General internet usage			
Q1	single	How often do you usually use internet?	1: 7 days a week 2: 5 or 6 days a week 3: 3 or 4 days a week 4: 1 or 2 days a week 5: Less than 1 day a week 6: Less than 1 day a month
Q1b		How many hours do you use the Internet in a typical day?	1: up to one hour 2: 1-2 hours 3: 3-4 hours 4: 5-6 hours 5: 7 hours or more
Q1c	GRID (TABLE) QUESTION. One answer for each location.	How often do you generally use internet on each of the following places ?	A. Home B. At work C. At school or at university D. Mobile (on the street, underway or at public places) E. Elsewhere 1. 7 days a week 2. 4-6 days a week 3. <= 3 days a week 4. Never

Q2	multiple + open text	Over the past month, have you at any time used the internet via one of the following devices (e.g. to surf, send or receive e-mails, use online banking or social networks,...)?	1. Desktop computer 2. Portable computer (laptop) 3. Tablet 4. Smartphone (mobile telephone with internet access) 5. Portable multimedia console (e.g. PlayStation Portable, Nintendo DS,...) 6. TV player 7. Another device: _____
Q2b	If Q2 = 1	Over the past month, have you at any time used the internet on a desktop computer on the following places (e.g. to surf, send or receive e-mails, use online banking or social networks,...)? <i>Several answers possible</i>	1. at home 2. at work 3. in school or at the university 4. with friends or acquaintances 5. somewhere else
Q2c	If Q2 = 2	Over the past month, have you at any time used the internet on a portable computer on the following places (e.g. to surf, send or receive e-mails, use online banking or social networks,...)? <i>Several answers possible</i>	1. at home 2. at work 3. in school or at the university 4. with friends or acquaintances 5. somewhere else
Q3	single	What device are you using right now to fill out this survey?	1. Desktop computer 2. Portable computer (laptop) 3. Tablet 4. Smartphone (mobile telephone with internet access) 5. Portable multimedia console (e.g. PlayStation Portable, Nintendo DS,...) 6. TV player
Q4	single	Are you the only person who uses the internet from this device?	1: Yes 2: No
Q4b (If Q4=2)	single (both) Together on 1 screen	What is your share in the overall <u>internet</u> use from this device?	1: I am the main user of this device 2: I use this device to the same degree as other user(s) 3: I make less use of this device than other user(s) 4: I don't know
Q5 (If Q4 =2)		Are different accounts (logins) being used on this device?	1: Yes 2: No 3: I don't know
If Q5=1		What account (login) do you use on this device?	1: I use the same account (login) as other users 2: I use my personal account (login) 3: I don't know
Q6 (If Q3=1 Vaste computer)	single if (Q6 = 3 OR Q6 = 4 OR Q6 = 5) STOP interview (screen out)	Where is this desktop computer located ?	1. at home 2. at work 3. in school or at the university 4. with friends or acquaintances 5. somewhere else

Q7 (If Q3=2 laptop)	single	Where do you mainly use this portable computer?	1. at home 2. at work 3. in school or at the university 4. on different locations
		(Think about the internet browser by which you're filling in this survey on this device). Are you using also other browsers on this device? If so, how often?	1: I only use this browser 2: I use this browser more often than others 3: I use this browser equally often to others 4: I use this browser less often than others 5: I don't know/hard to say
Q8 (If Q3=3 Tablet)	single	Where do you mainly use this tablet?	1. at home 2. at work 3. in school or at the university 4. on different locations

Basic socio-demographic variables			
Q9	single	What is your gender?	1. Male 2. Female
Q12	single	What is the highest level of education that you have reached successfully, either in day school or evening school?	1: primary school or no degree 2: lower general secondary education (first 3 yrs) 3: lower secondary technical, artistic or professional education (first 3 years) 4: higher general secondary education (last 3 yrs) 5: higher secondary technical, artistic education (last 3 years) 6: higher secondary professional education (last 3 years) 7: candidate, bachelor (academic or professional), graduate 8: university licentiate, master, post graduate, extra-university higher education (long type) 9: university license with met additional degree, master after master 10: doctorate with thesis
Q13	single	Which category responds the best to your current professional situation?	1: I am a pupil student in formation 2: I work full-time 3: I work part-time 4: I have temporarily suspended my professional occupation / I'm using up time credit 5: I have no employment at the moment (e.g. pensioned, jobless, ...)
Q14 (If Q13=5)	single	Which statement suits you best?	1: I am a houseman housewife 2: I am incapacitated 3: I am jobless 4: I am in early retirement 5: I am pensioned 6: Other
Q15 (If Q13= 2 or 3 or 4)	single	What is your professional status (for your main occupation)?	1: independent 2: employed in the public sector 3: employed in the private sector
Q16 (If Q13= 2 or 3 or 4)	single	Which of the following categories corresponds the best with your profession?	1: farmer 2: artisan 3: merchant, industrialist 4: worker 5: clerk 6: middle management (e.g. head of department or division, ...) 7: member of the general management, senior executive (e.g. director, manager, ...) 8: free profession 9: freelance, self-employed
Q17 (If Q16 = 1 or 2 or 3 or 6 or 7 or 8 or 9)	single	For how many employees are you responsible?	1: 0 2: from 1 to 5 3: from 6 to 10 4: 11 or more
Q18 (If Q16=4)	single	Are you a ...?	1: skilled worker 2: unskilled worker

Q19 (If Q16=5)	single	Are you a ...?	1: clerk with primarily office work 2: clerk with little or no office work
Q20	numeric 0-15	Can you indicate how many household members, EXCLUDING yourself, are living with you on a permanent basis or at least half of the time (e.g. during the week, one week out of two)	I__I__I members
Q21 (If Q20 >0 for each)	numeric 0-99	Can you indicate the age of each household member ?	I__I__I year
Q22 (If Q20 >0)	single	Are you usually the person in charge of the choice of brands for food, drinks and maintenance products in your household?	1: Yes 2: No
Q23 (If Q20 >0)	single	Who is the main responsible for the income in your household (the person with the highest income)?	1: Myself 2: Someone else
Q24 (If NOT Q23 PI is Myself - PI = MRI)	single	What is the highest level of education that was reached successfully by the <u>main responsible for the income</u> , either in day school or evening school?	1: primary school or no degree 2: lower general secondary education (first 3 yrs) 3: lower secondary technical, artistic or professional education (first 3 years) 4: higher general secondary education (last 3 yrs) 5: higher secondary technical, artistic education (last 3 years) 6: higher secondary professional education (last 3 years) 7: candidate, bachelor (academic or professional), graduate 8: university licentiate, master, post graduate, extra-university higher education (long type) 9: university license with met additional degree, master after master 10: doctorate with thesis 11: I don't know
Q25 (If NOT Q23 PI is Myself - PI = MRI)	single	Which category responds the best to the current professional situation of the <u>main responsible for the income</u> ?	1: pupil student in formation 2: working full-time 3: working part-time 4: has temporarily suspended his/her professional occupation / is using up time credit 5: has no employment for the moment
Q26 (If Q25 = 5)	single	Which statement suits the <u>main responsible for the income</u> best?	1: houseman housewife 2: incapacitated 3: jobless 4: in early retirement 5: pensioned 6: other

Q27 (if Q25 = 2 or 3 or 4)	single	Which of the following categories corresponds the best with the profession of the <u>main responsible for the income?</u>	1: farmer 2: artisan 3: merchant, industrialist 4: worker 5: clerk 6: middle management (e.g. head of department or division, ...) 7: member of the general management, senior executive (e.g. director, manager, ...) 8: free profession 9: freelance, self-employed
Q28 (if Q10 age >= 36 years)	single	Are you a grandfather or grandmother ?	1: Yes 2: No
Q29 (if Q28=1)	multiple	Do you have grandchildren in the age ranges below?	1: 0 to 2 year 2: 3 to 5 year 3: 6 to 11 year 4: 12 to 14 year 5: 15 to 17 year 6: 18 to 24 year 7: 25 year and older
Q30	single	What language do you usually speak at home?	1: Dutch 2: French 3: German 4: English 5: Arab 6: Spanish 7: Italian 8: Polish 9: Turkish 98: Other: (specify)
Q31	single	Do you speak other languages at home?	1: Yes 2: No
Q32 (if Q31 = 1)	multiple	What other languages do you speak at home?	1: Dutch 2: French 3: German 4: English 5: Arab 6: Spanish 7: Italian 8: Polish 9: Turkish 98: Other: (specify)
Participation			
Q90	single + open	Do you wish to participate in the sweepstake? (You can win)	1. Yes, if I win, please inform me via the following e-mail address [.....] 2. No, I do not wish to participate

CIM Internet Tablet and Smartphone Panel questionnaire for adults (18+)

This version is a slightly shortened version of the PC version. Questions on the number of hours spent on the Internet on a typical day, accounts used on the device and the language(s) spoken at home are not asked in this version.

CIM Internet PC Cookie Panel simplified questionnaire for 12-17 year olds

What is your year of birth?	
12-14 years: You have to ask your parents for permission if you want to take part in the study. Do you give permission for your child to take part in the survey?	1: Yes 2: No
Do you live in Belgium?	Yes/No
What province do you live in?	Antwerp Brussels Hainaut Limburg Liège Luxembourg Namur East-Flanders Vlaams-Brabant Waals-Brabant West-Flanders I do not live in Belgium
What is your zip code? (Only for Vlaams-Brabant)	
Generally where do you connect to the Internet <u>using desktop computer or laptop</u> ?	at home at work at school or at the university at friends or acquaintances other place
Over the past month, have you at any time used the internet via one of the following devices (e.g. to surf, send or receive e-mails, use online banking or social networks, ...)?	Desktop computer Portable computer (laptop) Tablet Smartphone (mobile telephone with internet access) Portable multimedia console (e.g. PlayStation Portable, Nintendo DS,...) TV player Another device
Who uses internet on the <u>device</u> you are on now?	1: mainly me 2: mainly other children 3: mainly adults
What is your gender?	Female/Male
Do you wish to participate in the sweepstake? (You can win <u>nice prizes</u>)	Yes, if I win, please inform me via the following e-mail address No, I do not wish to participate
Can CIM invite you in the future to participate in other media studies?	Yes, please invite me via the following e-mail address: ____ No, I do not wish to be invited

8.2 Annex 2: Published socio-demographic variables

Most socio-demographic variables are questioned directly (e.g. age, gender or professional activity of the person interviewed). Others are the result of a treatment on basic data (e.g. social groups, region). The following variables are available in eGemius and the planning files:

GENDER	MEN WOMEN
AGE IN YEARS	
LANGUAGE	FRENCH DUTCH
NIELSEN REGION	I II III IV V
PROVINCES	WALLOON BRABANT BRUSSELS 19 ANTWERP FLEMISH BRABANT WEST FLANDERS EAST FLANDERS HAINAUT LIEGE LIMBURG LUXEMBURG NAMUR
EDUCATIONAL LEVEL INTERVIEWED PERSON	NONE PRIMARY SECONDARY LOW SECONDARY HIGH GEN., TECHN. ART. SECONDARY HIGH PROF BACHELOR MASTER
PROFESSIONAL ACTIVITY INTERVIEWED PERSON	SELF EMPLOYED SALARY PUBLIC SECTOR SALARY PRIVATE SECTOR WITHOUT PROFESSIONAL ACTIVITY

PROFESSION INTERVIEWED PERSON	SMALL COMMERCE, ARTISAN, INDUSTRIAL AND FREELANCE 5-, FARMER UPPER MANAGEMENT, LIBERAL PROFESSIONS, BIG COMMERCE, INDUSTRIAL AND FREELANCE 6+ MIDDLE MANAGEMENT EMPLOYEE SKILLED WORKER UNSKILLED WORKER HOUSEWIFE RETIRED UNEMPLOYED STUDENT OTHER
MAIN RESPONSABLE FOR INCOME	MRI YES MRI NO
SOCIAL GROUPS	1 2 3 4 5 6 7 8 Don't know
NUMBER OF PEOPLE IN THE HOUSEHOLD	1 2 3 4 5+
GRANDPARENT	YES NO
GRANDCHILDREN 0-2 YRS	YES NO
GRANDCHILDREN 3-5 YRS	YES NO
GRANDCHILDREN 6-11 YRS	YES NO
GRANDCHILDREN 12-14 YRS	YES NO
GRANDCHILDREN 15-17 YRS	YES NO
GRANDCHILDREN 18-24	YES NO
GRANDCHILDREN 25+	YES NO
PERSON RESPONSABLE FOR PURCHASES	YES NO
LANGUAGE MOST SPOKEN AT HOME	FRENCH DUTCH GERMAN ENGLISH OTHER LANGUAGE
INTERNET USAGE DEVICES	DESKTOP COMPUTER PORTABLE COMPUTER TABLET SMARTPHONE PORTABLE MULTIMEDIA CONSOLE TV PLAYER ANOTHER DEVICE
INTERVIEWED PERSON'S AGE	12-14 15-17 18-20 21-24 25-29 30-34 35-39 40-44 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75+
INTERVIEWED PERSON AGE 18-	12-17
INTERVIEWED PERSON AGE 18+	18 +
INTERVIEWED PERSON'S AGE (7 cat.)	12-14 15-24 25-34 35-44 45-54 55-64 65+

PRESENCE OF CHILDREN	1 CHILD 2 CHILDREN 3 CHILDREN AND MORE NO CHILDREN -55 NO CHILDREN +55
PRESENCE CHILDREN -1 YEAR	YES NO
PRESENCE CHILDREN 1 YEAR	YES NO
PRESENCE CHILDREN 2 YEARS	YES NO
PRESENCE CHILDREN 3-4 YEARS	YES NO
PRESENCE CHILDREN 5-6 YEARS	YES NO
PRESENCE CHILDREN 7-12 YEARS	YES NO
PRESENCE CHILDREN 13-14 YEARS	YES NO
5 Centers	YES NO

8.3 Annex 3: Calculation of social groups

Social groups are based on the educational level and occupation of the PRI (Person mainly Responsible for the Income).

For the CIM Internet study, we use a simplified version of the calculation of social groups in the CIM Golden Standard. Some versions of the popup questionnaire leave out the last occupation for people who are retired or jobless, and details on the PRI's occupation if the respondent is not the PRI.

Each educational level and occupation of the PRI receives a score. Both scores are then multiplied. The result is split into 8 groups, similar to the distribution of social groups in the internet population in the Virtual Population (see www.cim.be/nl/golden-standard for an explanation on the Golden Standard and the Virtual Population). Since the internet population has a higher social level than the general population, the highest social groups represent more than 1/8 of the panel.

The tables below show the scores used for education and occupation.

The values actually used as boundaries of the social groups may vary slightly from year to year.

Education	Score
primary school or no degree	10
lower general secondary education (first three years achieved)	35
lower secondary technical, artistic or professional education (first three years achieved)	25
higher general secondary education (last three years achieved)	50
higher secondary technical, artistic education (last three years achieved)	45
higher secondary professional education (last three years achieved)	40
candidate, bachelor (academic or professional), graduate	75
university license, master, post graduate, extra-university higher education (long type)	85
university license with additional degree, master after master	90
doctorate with thesis	100

Profession MRI	Score	Comment
Pupil / Student / in formation	10	
Suspension of professional occupation / time credit	50	
Housewife	10	
Incapacitated	10	
Jobless	29	60% of last profession (based on weighted average in VP2020)
Early retirement	42	75% of last profession (based on weighted average in VP2020)
Pensioned	34	60% of last profession (based on weighted average in VP2020)
Other	50	
Farmer	45	
Artisan	70	
Profession MRI	Score	Comment

Merchant, Industrialist 5-	70	
Merchant, Industrialist 6+	90	
Merchant, Industrialist	71	weighted average for merchant, industrialist (VP2020)
Skilled worker	50	
Unskilled worker	25	
Worker	46	weighted average for skilled and unskilled (VP2020)
Clerk with primarily office work	65	
Clerk with little or no office work	60	
Clerk	62	weighted average for office worker or not (VP2020)
Middle management 5-	70	
Middle management 6+	75	
Middle management	72	weighted average for middle management (VP2020)
Member of the general management, senior executive 5-	80	
Member of the general management, senior executive 6-10	90	
Member of the general management, senior executive 11+	100	
Member of the general management, senior executive	93	weighted average for general management (VP2020)
Free profession	100	
Freelance, self-employed 5-	70	
Freelance, self-employed 6+	90	
Freelance, self-employed	71	weighted average for freelance, self-employed (VP2020)

Age MRI

If Age MRI ≥ 45 --> Score Education MRI * Score Profession MRI

If Age MRI < 45 --> Score Education MRI * Score Profession MRI - 1