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Impact of online music streaming services adopting the UCPS

Results of CNM–Deloitte study





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BACKGROUND

The UCPS is the focus of recent debate and has industry professionals differing in opinion.

The way we consume music has changed dramatically: online music streaming platforms have experienced a massive rise (+23.5% streams between 2018 and 2019) and in 2019 they represented 59% of recorded music sales (SNEP, *L'économie de la production musicale*, published 2020). The growing influence of this music distribution method has raised questions concerning how these platforms distribute royalty payments.

Several studies have been carried out (and some even published) in France and Europe on the impact of adopting the new UCPS (User-Centric Payment System) compared to the current model in use, called MCPS (Market-Centric Payment System) or “pro-rata system”. These studies have been carried out using different methodological approaches, often resulting in contradictory results that are impossible to compare.

In light of this, the Centre National de la Musique (CNM), as part of its mission as a music industry observatory, has been commissioned by the French Ministry of Culture to carry out a study aiming to identify the impact of switching to the UCPS in France.

Launched in April 2020, the aim of the study is to carry out a comparative and objective analysis of the impact of the two systems, particularly in regard to promoting musical diversity. Conducted by the CNM with support from Deloitte, the study was carried out in a concerted framework with contribution from industry professionals representing different sectors of the industry: artists, producers, record labels, distributors, collective management organisations and online music platforms.

APPROACH

Comprehensive analysis over four successive stages of the impact of adopting the UCPS



QUALITATIVE ANALYSIS

Interview stage for gathering information from French music industry professionals.

- Inventory of other studies available
- Identify existing results interpretations and issues raised
- Overview of opinions and arguments related to the study's four areas of focus
- Qualitative evaluation of the impact of adopting the UCPS concerning music recommendations, setup costs and the fight against fraud.

Participants: Deezer, Spotify, IDOL, Believe, Wagram, Because, Suther Kane Films, Outthere Music, tôt Ou tard, PIAS, Universal Music, Warner Music, Sony Music, GAM, Sacem.



COMPARE EXISTING METHODS

In-depth, comparative analysis of methods applied in existing studies.

- Record methods used by Deezer, Spotify and the Sacem
- Comparative analysis of methods used to identify parameters, calculation methods and chosen areas of focus
- Outline methodological choices explaining the differences between the different participants' conclusions.

Participants: Deezer, Spotify, Sacem.



DEVELOP A COMMON METHOD

Devise an impartial, common method that all participating streaming platforms can execute.

- Review existing methods in order to create a common method
- Check that the common method is feasible and robust, applying it to a sample of data provided by Deezer and Spotify.

Participants: Deezer, Spotify, Sacem.



ANALYSE QUANTITATIVE RESULTS

Participating platforms execute common method.

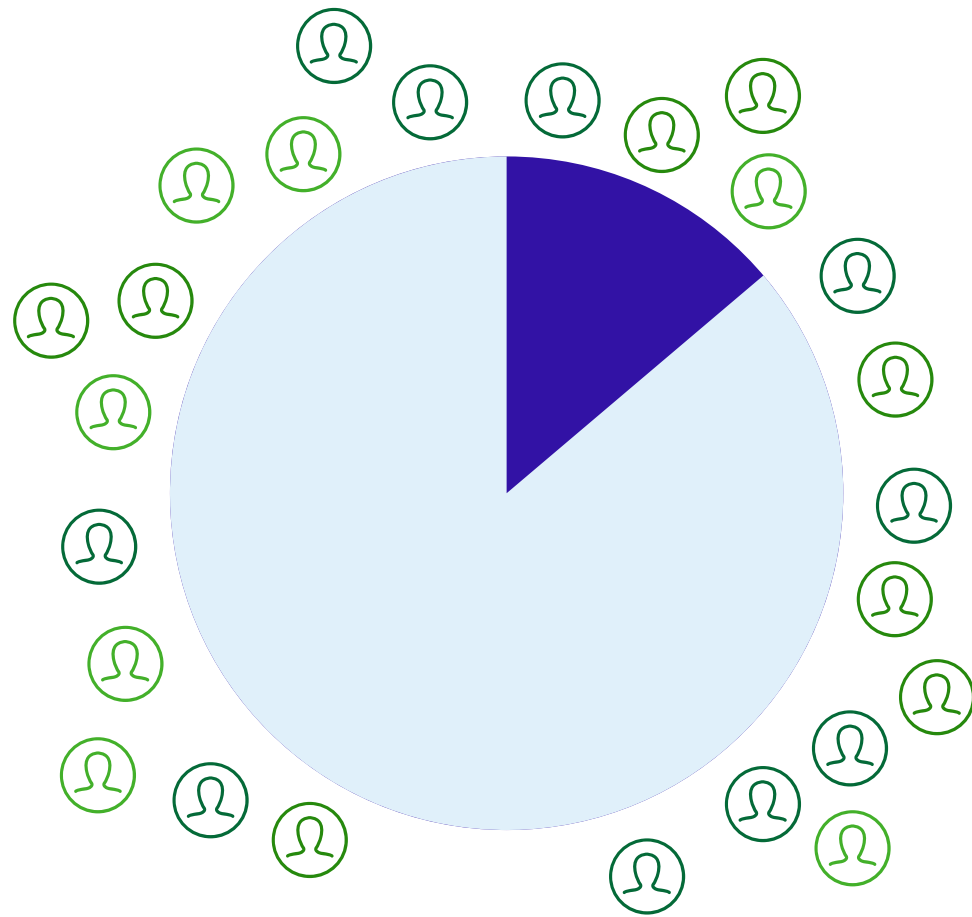
Analyse the results in order to evaluate the impact of the UCPS on the streaming market in France.

- Quantitative evaluation of adopting UCPS on royalty distribution and musical diversity exposure.
- Formalise results.

Participants: Deezer, Spotify.

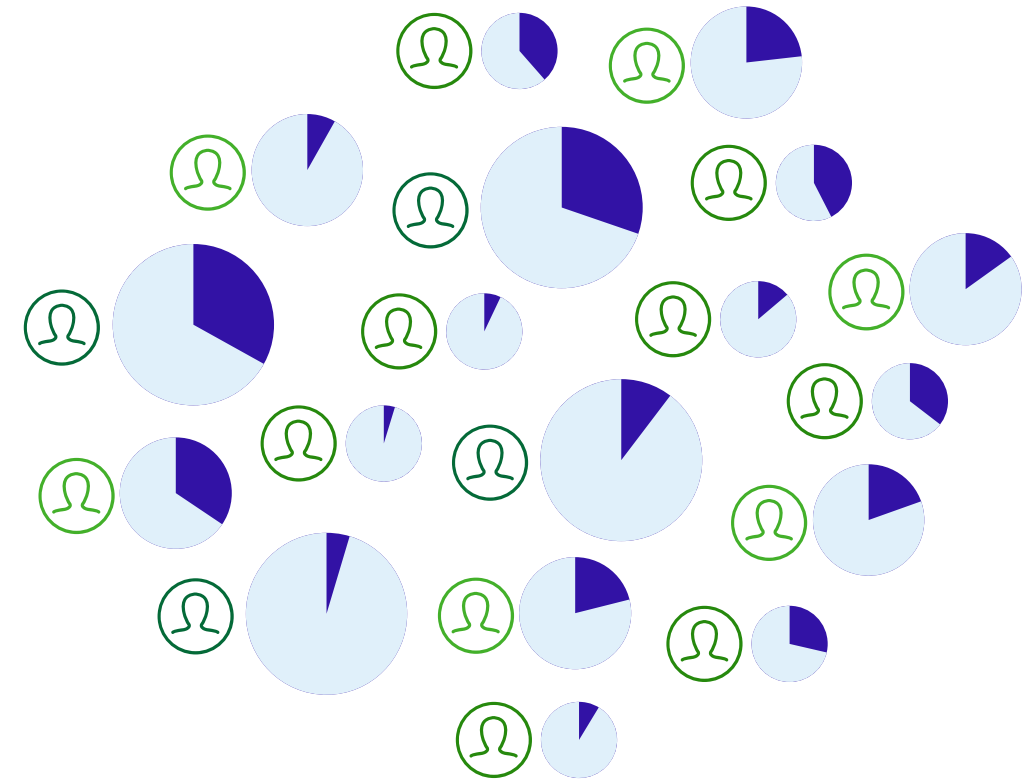
DEFINITION OF MCPS AND UCPS MODELS

Presentation of the two types of royalty distribution methods



Market-Centric Payment System (MCPS) or “pro-rata”

Royalties are distributed to rights-holders in proportion to their market share, or rather, proportionate to a rights-holder’s share of the total streams (one stream equates to a listening time of at least 30 consecutive seconds) on the streaming service.



User-Centric Payment System (UCPS)

Royalties generated from a user’s subscription fees are distributed according to what songs the user listens to (one stream equates to a listening time of at least 30 consecutive seconds) over a given period.

COMMON METHOD

Method developed after reviewing existing methods



Compare existing methods

- An analysis of methods adopted, data used, indicators assessed and conclusions expressed shows that **each participant has different scopes of research** defined in a possibly subjective manner.
- For example, Deezer's scope of research analyses French consumption for all paying subscribers, while Spotify analyses global consumption for Standard Premium subscribers only (excluding Family or Student multi-account options).
- These **contrasting areas of focus** imply that data and variables selected for each study are participant-specific.
- The findings from each study are based on different temporalities, geographical zones, subscriber types, dimensions, and areas of focus. This makes it **difficult to compare** conclusions and thus impossible to distinguish the true impact of adopting the UCPS.
- A **common method used by all must be established** in order to compare results and clearly identify the impact for adopting the UCPS.



Develop a common method

- In order to evaluate the overall impact, the common method analysis period covers the **2019 calendar year for the French market only**, looking at the consumption of **all users with a paid subscription to the entire music catalogue** (excluding podcasts).
- Data used in method calculations and analysis includes **parameters relating to users, streams, tracks, artists and rights-holders**.
- The common method ensures the delivery of **indicators that enable data used by streaming platforms for their calculations to be represented statistically**.
- **Deezer applied the common method to a full sample (year 2019 and to all parameters)**.
- **Spotify decided to implement its own method**. The scope included French Standard Premium users and different areas of focus and analysis parameters. However, in order to compare with Deezer's results, the common method was applied to a random sample of 100,000 users provided by Spotify for the first half of 2019.
- **The Sacem was unable to participate in the common method due to scheduling constraints**.

COMMON METHOD

Defining the scope and presenting methodological choice

Defining parameters

Music parameter: the whole catalogue



The study covers the whole music catalogue (specific to each platform, excluding podcasts) to ensure the impact can be assessed overall.

Time-related parameter: 2019 calendar year



In order to compensate for seasonal or circumstantial behaviour, the study will be carried out over a period of 12 consecutive months.

Geographic parameter: subscribers in France



In order to assess the overall impact, the study will be conducted on all French consumption (no sampling) and include content from all countries.

Type of user parameter: paying subscribers



Only paying subscribers will be considered in the study. Freemium users are disregarded.

Choice of methods for data processing

Numeris value

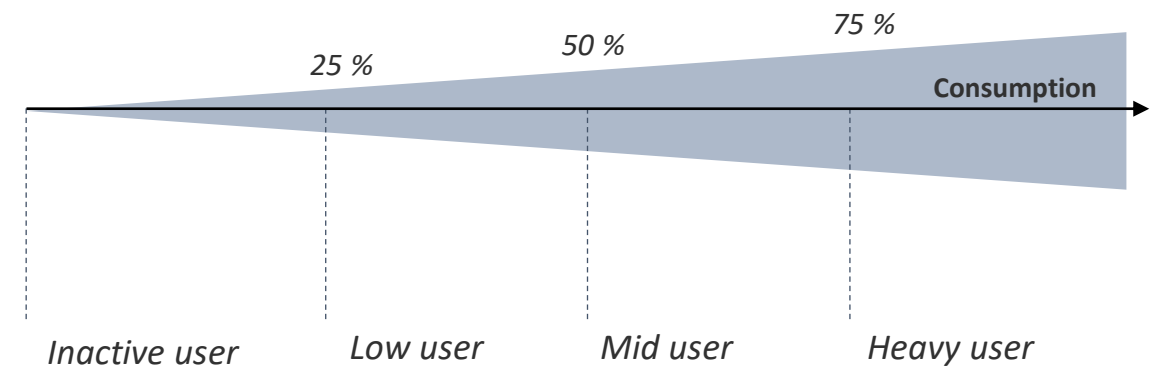
Counts the **individual number** of streams

Temporis value

Counts streams according to **their duration**

Special attention was given to the *numeris* approach as it best corresponds to the model most commonly used today. While the *temporis* model was integrated into the common method, the impact assessment according to this calculation principle for the *temporis* value was not carried out due to lack of data available within the timeframe of the study.

... and statistical user segmentation



COMMON METHOD

Areas of focus



Royalty distribution

- Dividing up market share according to the distributor, country of song production, back catalogue.
- Analyse differences in market share for songs, artists and rights-holders between the MCPS and UCPS.
- Calculate the market concentration ratio for the Top 100 rights-holders.
- Evaluate the concentration of royalties per user group (*heavy user, mid user, low user*).



Musical diversity

- Analyse the promotion of music genres and songs.
- Analyse artist and song visibility in rankings



Fight against fraud, cost effectiveness, recommendations

- During the study, it was not possible to define a method of quantitative analysis on the impact of the UCPS on fraud and music recommendations. The study approaches this issue qualitatively.
- Likewise, the issues surrounding the costs of switching from one model to another, was addressed qualitatively, since documented, quantitative data could not be provided.

COMMON METHOD

Main limitations



Identifying rights-holders

Limitations

The data available on streaming services only allows for the **distributor** to be identified.

Impacts

- Unable to examine the impact of switching to the UCPS on producers (amongst others).

Two other limits:

- **Country of production:** information identified from the ISRC-listed country code (a code which may contain inaccuracies) equivalent to the registered country in which the song was recorded.
- **Language of lyrics** (French-speaking countries): not available via the platforms.



Music genres

Limitations

Music genres are categories to which **no shared definition** fits. What's more, one song can be associated with several music genres, thus making it more complex when recording genres.

Impacts

- Imprecise and approximate when looking at the impact of switching to the UCPS on music genre diversity.



Release date

Limitations

The release date of a song on a streaming platform **can correspond to several different dates:** the date first historically released, the date first released on a streaming platform, the release date of a compilation which the song features on...

Impacts

- Certain songs categorised as new when their release date was in fact earlier than the threshold defined for this category.



QUALITATIVE ANALYSIS

Findings

Algorithmic music recommendations

Rights-holders' representatives have lamented a lack of transparency concerning how different recommendation services work. Some have expressed (without being able to document) their fears about how recommendation tools can potentially steer users towards royalty-free or non-musical content, for strategic or financial reasons.

On the other hand, online music platforms have indicated that recommendation services are highly appreciated by users and their neutrality is what makes them so effective. Furthermore, **the platforms interviewed indicated that they had begun to devise official best practice codes to tackle stream manipulation.**

A quantitative analysis of royalty distribution between “recommended” streams and “self-chosen” streams is complex: a common definition used by all is required for these stream categories (self-chosen/recommended streams, active/passive listens), so that data coming from platforms, which each have their own way of working and depend on different confidential mechanisms, can be reconciled and compared.

With this in mind, the **estimated share of (automatically generated) recommended streams varies differently depending on the intermediary: between 10% and 20% according to online music platforms, and up to 80% according to certain record labels.**

In view of the highly strategic nature of recommendation services, it seems that the CNM (which industry professionals consider as a trusted third party) must carry out a **thorough collaborative study on ways of greater transparency** in the matter.



QUALITATIVE ANALYSIS

Findings

UCPS implementation costs

The potential technical costs **generate concern** amongst several rights-holders and **estimates vary widely** depending on the platform.

Online music services indicate that in the event that the data exchange platforms with rights-holder remain unchanged, platforms will **bear the costs related to the development and maintenance of the model's operational conditions, but estimates contrast:**

- Deezer confirms it has already taken care of technical costs, which are mainly development costs handled by four part-time engineers over a six-month period (the equivalent of roughly 240 days/person).
- Spotify estimates that switching to UCPS would result in a 2% to 3% rise in operating costs.
- Certain platforms, whose market share amounts to less than that of the two aforementioned companies, have not yet estimated the eventual costs or don't have the capacity to envisage such modifications to their current systems.

Subject to this assumption, **rights-holders (distributors) would, on the other hand, be responsible for the costs of verifying reports and calculations submitted by the platforms.** With a more sophisticated model (multiple weightings operated at the user level), verifying platforms' royalty distribution results under the UCPS would be more complex and could generate additional verification costs.

The rights-holders interviewed expressed concerns over the **distribution of UCPS implementation costs throughout the whole value chain** at the cost of artists, producers and distributors. Rights-holders were unable to estimate the costs, due to lack of data.

This point requires further clarification before a system modification could be considered.



QUALITATIVE ANALYSIS

Findings

Fight against fraud

The UCPS appears to **reduce certain types of fraud**. Under this model, mass streaming (via fake “streaming farms”) would see its impact on royalty distribution heavily reduced (as distribution occurs on an individual user level and their total number of streams over the period). The same applies for fraud linked to account hacking (an account cannot generate more income than the subscription amount linked to it, thus a greater number of accounts would need to be hacked).

However, switching to the UCPS could **increase certain fraud techniques or cause new ones to emerge**, such as targeting low or inactive users or hacking unused Family Plan sub-accounts. Professionals hackers are likely to find alternative ways of generating revenue, whatever the distribution model.

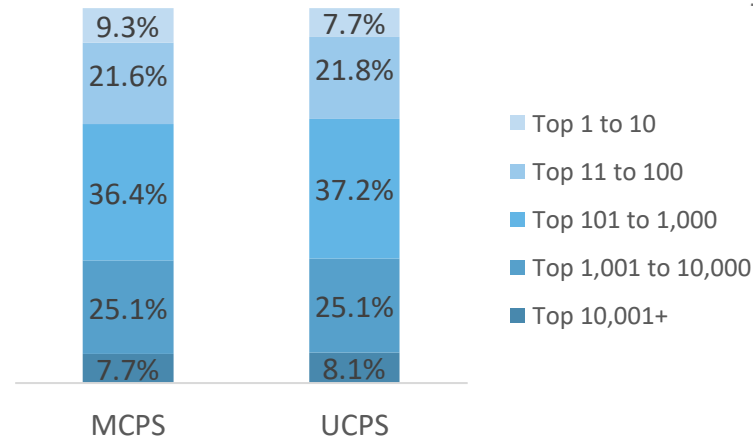
The fight against fraud goes well beyond the issue of royalty distribution. It is one of the major issues in music streaming and which rights-holders often question platforms about.

The UCPS can not be considered as foolproof against all types of fraud occurring on such platforms. The UCPS is not the only — nor the best — way to fight against fraud: **platforms must be constantly vigilant to detect fraudulent streaming, and rights-holders wish for more transparency over methods used.**

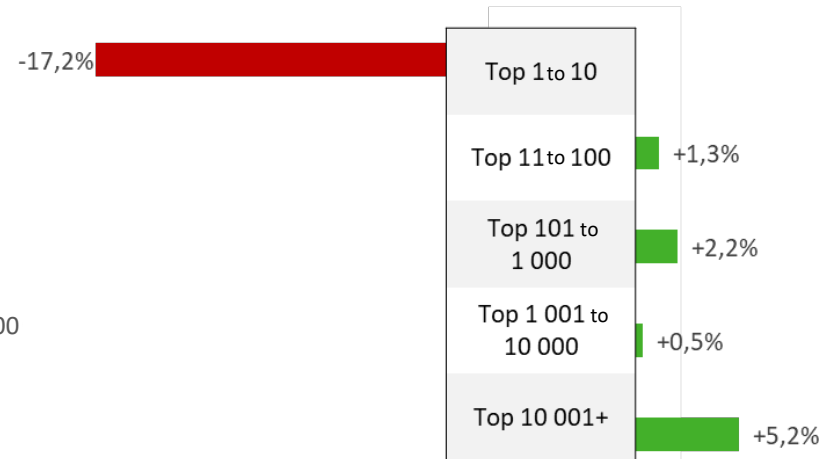


QUANTITATIVE RESULTS

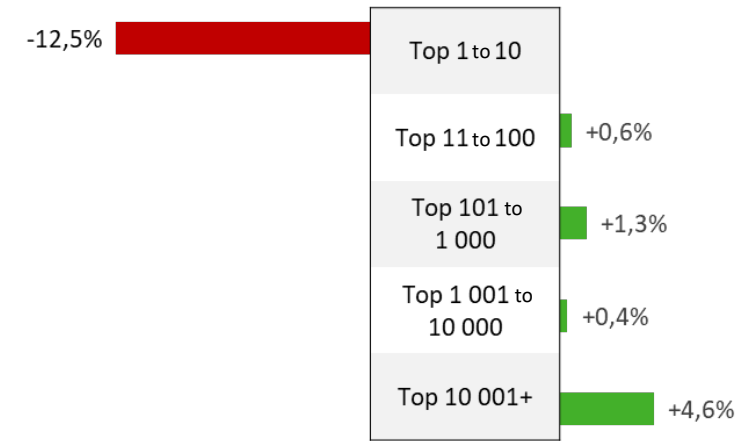
Royalty distribution — top artists (comparative analysis of results from Deezer and Spotify)



Royalty distribution amongst top artists (Deezer 2019)



Change in royalties amount per artist according to tier, under the UCPS (Deezer 2019)



Change in royalties amount per artist according to tier, under the UCPS (Spotify, random sample of 100,000 Standard Premium users, H1 2019)

The UCPS reduces royalties for Top 10 artists (-17.2 % for Deezer, -12.5 % for Spotify), levelling out the middling tiers with a slight increase in royalties received, and clearly increases royalties for lesser-streamed artists (> 10,000th place) (+5.2 % for Deezer, +4.6 % for Spotify).

In terms of value, this increase in royalties for lesser-streamed artists seems less significant given their weight of royalty distribution.



QUANTITATIVE RESULTS

Financial forecast — Top artists (based on results from Deezer)

Top artists	MCPS distribution	UCPS distribution	Change (pt.)	Change (%)	Change (€)*	Average financial variation in royalties paid to the entire chain (distributors, producers, artists) according to the artist approach
Top 10	9,3 %	7.7 %	-1.60	-17.2 %	-€4,574,223	-€457,422
Top 11 to 100	21.6 %	21.8 %	0.28	1.3 %	€810,407	€9,005
Top 101 to 1,000	36.4 %	37.2 %	0.79	2.2 %	€2,259,493	€2,511
Top 1,001 to 10,000	25.0 %	25.1 %	0.12	0.5 %	€348,351	€39
Top 10,001+	7.7 %	8.1 %	0.40	5.2 %	€1,155,972	< €10

(*) Breakdown based on 2019 figures from audio streaming subscription sales market estimated at €285,763 excluding VAT (distributors share). Source: SNEP

To understand the financial impact of switching to the UCPS, a financial forecast of the calculated impact on artists was carried out on the streaming market concerned by this study, based on results from Deezer. This extrapolation is an estimate intended to reflect the amounts associated with the calculated change. The average financial change was calculated from the change in points between the distribution for MCPS and UCPS, relating to artists in the tier concerned:

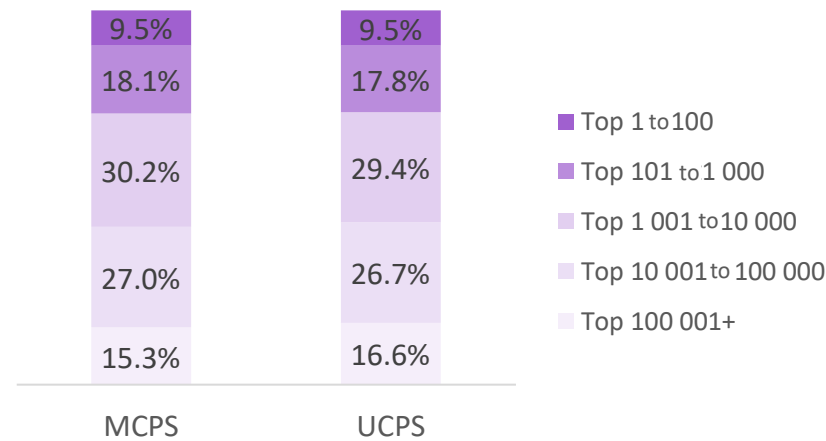
- The Top 10 artists are heavily impacted with a -17.2% decrease in royalties, which on average equates to several hundreds of thousands of euros of annual royalties for rights-holders.
- Outside of the Top 10,000 artists, royalties distributed per artist to the entire chain are on average less than €10. Adopting the UCPS would thus have a relative impact on royalties generated for lesser-streamed artists.

It should be noted that there may be great disparity in situations between artists within the same tier. Furthermore, the static, non-dynamic approach does not include the weakened drop and the amplified rise in value that would entail rapidly increasing revenue from streaming subscriptions.

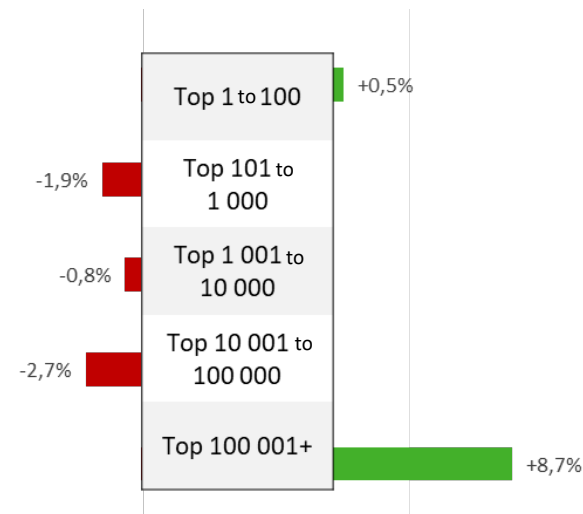


QUANTITATIVE RESULTS

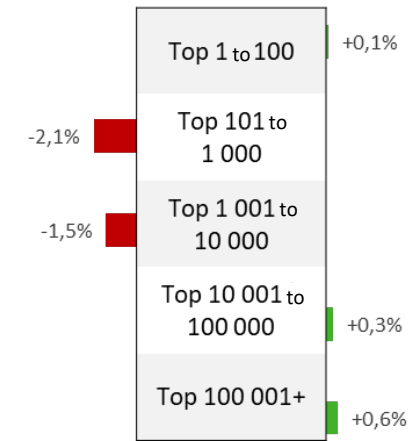
Royalty distribution — Top tracks (comparative analysis of results from Deezer and Spotify)



Royalty distribution amongst top tracks (Deezer 2019)



Change in royalties amount per track according to tier, under the UCPS (Deezer 2019)



Change in royalties amount per track according to tier, under the UCPS (Spotify, random sample of 100,000 Standard Premium users, H1 2019)

There is a slight increase for the Top 100 tracks, and a decrease for the Top 101 to 10,000 tracks. The results for the Top 10,001 to 100,000 do not converge. **Outside of the Top 100,000, tracks would receive on average a significantly higher royalties share with the UCPS according to the results from Deezer, but results from Spotify do not confirm this trend.** The difference observed between the analysis of the two platforms could be explained by the limitations and level of representation of Spotify's data sample (100,000 Standard Premium users).

No financial forecast was produced for the top tracks.



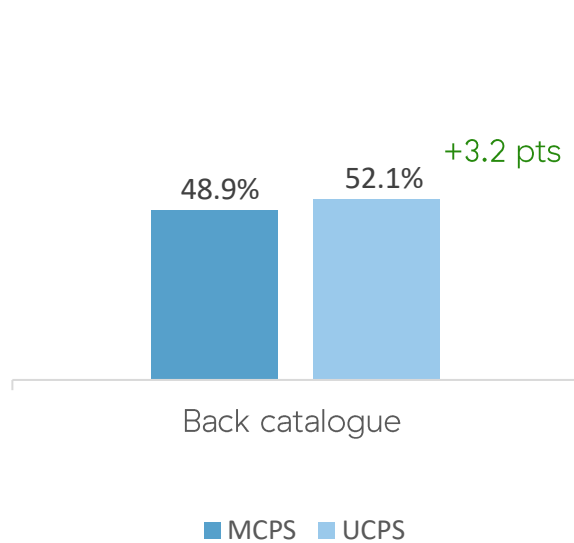
QUANTITATIVE RESULTS

Royalty distribution — back catalogue, main distributors and French produced tracks (results from Deezer)

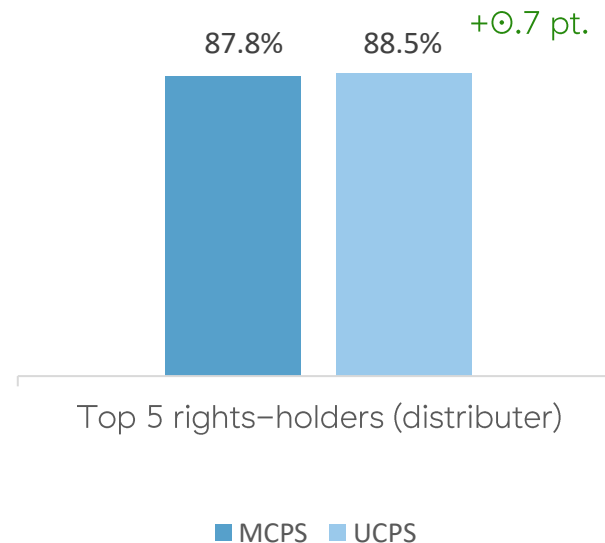
Switching to the UCPS results in a rise for back catalogue tracks (3.2%) and main rights-holders (+0.7%) for the Top 5 rights-holders in terms of number of streams. It should be noted that the limitations around the definition of back catalogue underestimates the volume of back catalogue.

In addition, the UCPS brings about a slight decrease in royalties distributed to French produced tracks (-0.8 pt.), however there are limitations in the method for identifying country of recording, as mentioned earlier.

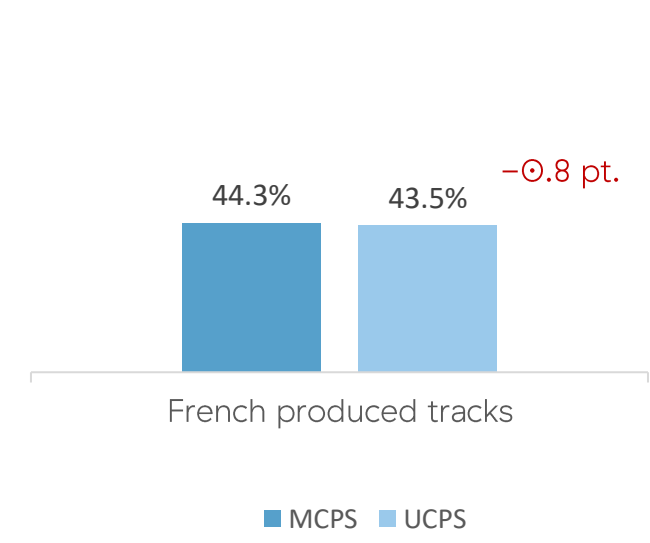
The share for top distributors increases only very slightly (+0,7 pt.).



Royalty share for back catalogue (Deezer 2019)



Royalty share for Top 5 rights-holders (Deezer 2019)



Royalty share for French produced tracks* (Deezer 2019)

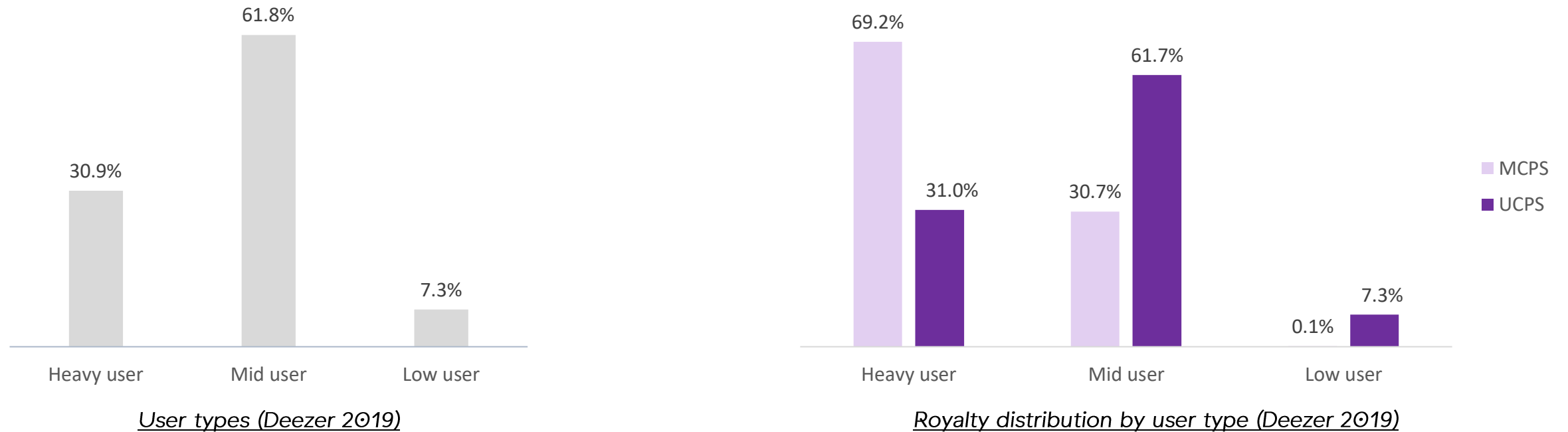
(*) French-produced songs are identified using the country code listed with the ISRC for every recording/recorded track.



QUANTITATIVE RESULTS

User-based royalty distribution by consumer type (results from Deezer)

By definition, under the UCPS the distribution of royalties per user is limited to the cost of the user's subscription fee. As a result, this limits heavy users from "sucking up" royalties as identified in the current model.



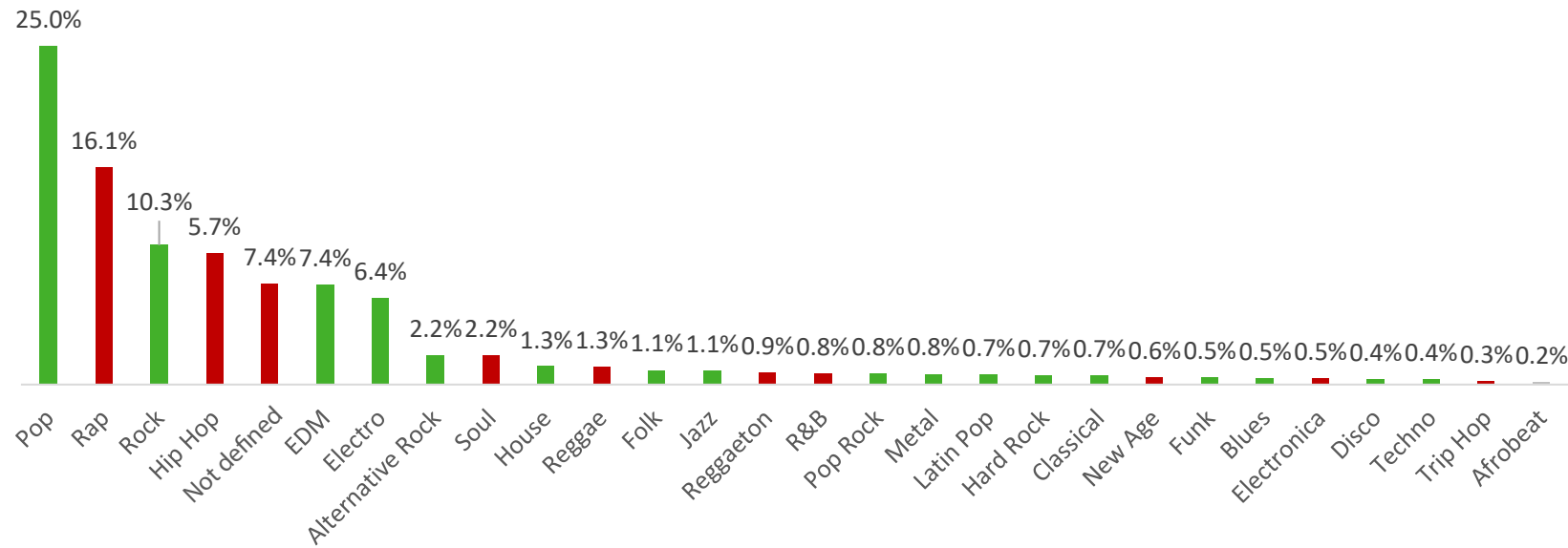
It would be worth researching further into this user*-type approach. The results shared by Deezer show that mid users represent 60 to 70% of users, regardless of the age group studied. Furthermore, 36% of heavy users are aged between 0 and 25, a similar percentage to that observed in the total number of users (33%).

*User types are defined according to different tiers measuring number of streams per month. By identifying the 1st and 3rd quartile of number of streams per month per user, the following segments can be defined: a heavy user's number of streams will be higher than the 3rd quartile value, while a low user's number of streams will be below the 1st quartile, and a mid user's streaming behaviour will be between the 3rd and 1st quartile values. Adopting this definition ensures that user segmentation is defined precisely and mathematically, and will be constantly re-evaluated in relation to overall consumption.



QUANTITATIVE RESULTS

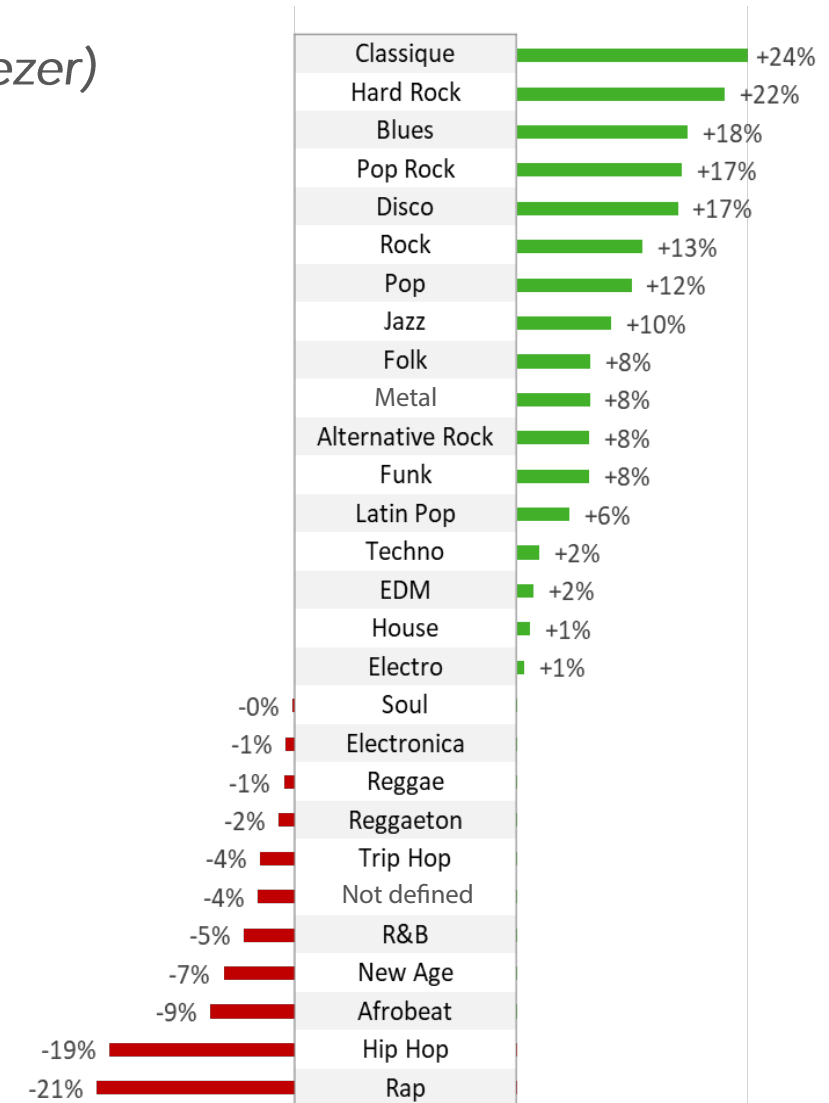
Royalty distribution according to track music genre (results from Deezer)



Consumption by track music genre* (Deezer 2019)

(* Deezer's music genre classification)

- UCPS has a **mostly positive impact on genres with lower listening shares**. Niche genres like classical music (+24%), hard rock (+22%) and blues (+18%) have a favourable percentage increase (the overall financial impact would remain relative due to their low streaming share).
- Amongst the most popular genres, there is a **positive impact on pop and rock (+12% and +13% respectively), to the detriment of rap and hip-hop (-21% and -19% respectively)**.
- These average results mask disparities linked to the popularity of certain tracks in each genre.
- As with the other quantitative results shown, they show the results for 2019, all else being equal and without taking into consideration market evolution.

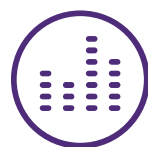


Change in amount of royalties per track music genre* under UCPS (Deezer 2019)

(* Deezer's music genre classification)

CONCLUSION ON THE IMPACT OF ADOPTING THE UCPS

Conclusions according to this study's areas of focus



Royalty distribution

- By definition, the UCPS would limit the influence of heavy users' streaming behaviour on royalties distribution, as identified in the current model.
- In percentage terms it would benefit artists with smaller audiences, even if the actual financial impact (in value) would be lower for these same artists.
- It would also boost the back catalogue's market share and would have a negative impact on French-produced tracks.



Implementation costs

- In the event that data exchange platforms remain unchanged, platforms should be mainly responsible for costs incurred when developing the model.
- Overall, the financial burden of these costs could be split between all actors in the value chain. Increased operational costs could be added on top of this, given the greater complexity of the system.



Music genre diversity

- UCPS would promote a redistribution of royalties in favour of niche genres, for example: classic (+24%), hard rock (+22%), blues (+18%). However, the financial impact (in value) would be relative to their market share despite double-digit growth.
- Amongst the most popular genres, UCPS would be unfavourable for rap (-21%) and hip-hop (-19%), but favourable for rock (+13%) and pop (+12%). Given their market shares, the redistribution in value would be more significant.



Fight against fraud

- UCPS would help to reduce the impact of one type of existing fraud, which consists in creating a maximum number of streams for targeted artists and tracks.
- By implementing UCPS, fraud could become more focused on targeting low or inactive users, or even hacking shared account sub-accounts.

TAKEAWAYS FROM THIS STUDY

What next?

Improve transparency and data accessibility

- Certain data was simply not available, such as identifying the **language in which a song is sung** or **rights-holders apart from distributors**. Some data is less reliable, such as identifying the **country of production** via the ISRC code.
- **Some platforms did not wish to take part in our study**. Furthermore, these platforms did not share their data with us. This could have enabled us to integrate a quantitative approach into the analysis of challenges surrounding the UCPS in terms of implementation costs, music recommendations and fraud.

Observe music diversity on online music services, especially in terms of music recommendations

- Since last summer, the CNM has been committed to expanding observations on musical diversity produced and distributed digitally. A new observational tool will be implemented in 2021, which will help increase the availability of data currently missing.
- Following on from this, the CNM suggests creating a special group, if necessary with support from academics, on the topic of **recommendation tools**.

Help develop paid streaming services in France

- The number of paying subscribers to streaming services in France is lower than our European neighbours. The value creation chain is a major topic for all genres that show growth and diversification potential for new applications and audiences.
- The CNM proposes to **initiate strategic foresight with all actors across the whole industry value chain, in collaboration with the French Ministry of Culture, on the challenges and ways of increasing growth for streaming in France, while ensuring the sustainability of the economic models of all stakeholders**.