

**IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

MELISSA FERRICK, et al.,

Plaintiff,

vs.

SPOTIFY USA INC., et al.,

Defendants.

No. 1:16-cv-08412 (AJN)

CORRECTED

**EXHIBIT B-1 TO THE DECLARATION OF JOAO DOS SANTOS
IN SUPPORT OF PLAINTIFFS' MOTION FOR FINAL APPROVAL**

VOLUME 4 of 7

Exhibit B-1

- 1 “Spotify: A Global Streaming Leader”
- 2 “Spotify Showing Momentum Ahead of Possible Listing”
- 3 “Exclusive Report: Spotify Artist Payments Are Declining in 2017, Data Shows”
- 4 “Spotify Research Report: The Rock Star of Streaming Services”
- 5 TuneCore Blog: How We’re Getting Your Mechanicals From Streams”
- 6 “Spotify Hit With \$150 Million Class Action Over Unpaid Royalties”
- 7 “Publishers Said to Be Missing as Much as 25 Percent of Streaming Royalties”
- 8 “Independent labels claimed 35% market share in the US last year ... by ownership”
- 9 “Understanding and Measuring the Illiquidity Risk Premium”
- 10 “Pandora Media Corp – Spotify Sub Leap Evidence of Expanding Market For On-Demand”
- 11 “US’ Music Streaming Royalties Explained”
- 12 Consolidated Financial Statements as of December 31, 2016 and Independent Auditor’s Report
- 13 “Exclusive Report: Spotify Artist Payments Are Declining in 2017, Data Shows”
- 14 “Independent labels have a 37.6% global market share, says new report”
- 15 “An International Legal Symposium on the World of Music, Film, Television and Sport: Enterprise Valuation”
- 16 “A Primer for Valuation of Music Catalogs”
- 17 “Music Publishing’s Steady Cash Lures Investors”
- 18 “Spotify, Valued at \$13 Billion, to Launch Direct Listing on NYSE: Sources”
- 19 “Inside Spotify’s Financials: Is There a Path to Profitability Or an IPO?”
- 20 “Global Music Investing 2.0: More Options = More Subs”
- 21 “Spotify’s Product Roars Ahead Amid Business Model Challenges”
- 22 “Streaming Music Topic Primer”
- 23 “Mechanical and Performance Royalties: What’s the Difference?”
- 24 “64 Amazing Spotify Statistics and Facts (October 2017)”
- 25 “Apple Music Saw Over 40M Users On Mobile Last Month, Leading Spotify by 10M”
- 26 “Big Publishers Feeling Cheated After Spotify’s Small Publisher Deal”
- 27 “Spotify Now Processes Nearly 1BN Streams Every Day”
- 28 “Spotify’s Losses Grow Despite Revenue Doubling in 2012”
- 29 “The Spotify Settlement with NMPA: What it Means for Music Publishers”
- 30 “Spotify Music-Streaming Service Launches in U.S.”
- 31 “Spotify vs. Apple Music: Which Service is the Streaming King?”

U.S. Music Streaming Royalties Explained

a/k/a How Do Artists Get Paid From Spotify?

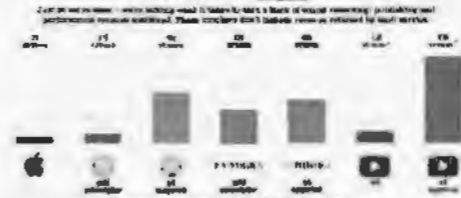
What Happens to a 100% of Revenue?



Legend

Revenue split by service and revenue source. Spotify and Apple Music are the only two services that pay for streaming. Spotify and Apple Music are the only two services that pay for streaming. Spotify and Apple Music are the only two services that pay for streaming.

What Does it Take for Content Owners to Earn a 100%?

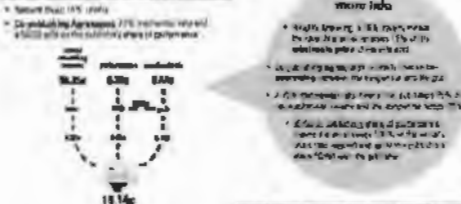


Note: These numbers are based on the assumption that you are streaming for one hour a day for 365 days a year. These numbers are based on the assumption that you are streaming for one hour a day for 365 days a year.

How Does All This Work for Artists?

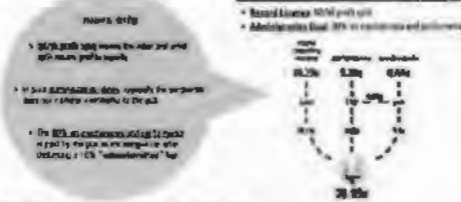
- While we can't give a simple example, below are three hypothetical scenarios that will show you how a digital dollar of revenue gets split between the artist, the label, and the service.
- These scenarios apply to artists that, at least in part, own rights to their own music. But there are songwriters who don't record it, i.e., they get no share recording it and recording it they don't write it, i.e., no pay off.
- To keep your head from spinning, we've used The Math based on a rough average of the industry and average dollar distribution claims. So for each scenario below, assume it is \$0.20 in a single recording session, not \$0.20 for performance, and \$0.10 for each track.
- For simplicity, we have also assumed the artist owns 100% of the song.

The Major Label Artist



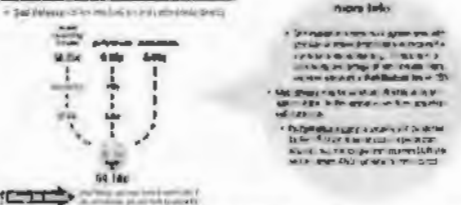
- Record Labels: 100% profit split
- Artists receive 10-15% of revenue
- Labels receive 85-90% of revenue
- Labels receive 85-90% of revenue
- Labels receive 85-90% of revenue

The Indie Label Artist



- Record Labels: 100% profit split
- Artists receive 75-80% of revenue
- Labels receive 20-25% of revenue
- Labels receive 20-25% of revenue
- Labels receive 20-25% of revenue

The Self-Releasing Artist



- Record Labels: 100% profit split
- Artists receive 100% of revenue
- Labels receive 0% of revenue
- Labels receive 0% of revenue
- Labels receive 0% of revenue

Service	Artist	Label	Service
Spotify	29.26%	6c	6.12c
Apple Music	28.5c	0.75c	0.75c
Amazon Music	28.5c	0.75c	0.75c
Pandora	28.5c	0.75c	0.75c
YouTube Music	28.5c	0.75c	0.75c
iHeartRadio	28.5c	0.75c	0.75c

NOTES:
 1. Spotify and Apple Music are the only two services that pay for streaming. Spotify and Apple Music are the only two services that pay for streaming. Spotify and Apple Music are the only two services that pay for streaming.
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 3. For simplicity, we have also assumed the artist owns 100% of the song.
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 5. These scenarios apply to artists that, at least in part, own rights to their own music. But there are songwriters who don't record it, i.e., they get no share recording it and recording it they don't write it, i.e., no pay off.
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 20. Labels receive 0% of revenue
 21. Labels receive 0% of revenue
 22. Labels receive 0% of revenue



**Spotify Technology S.A.
42-44, avenue de la Gare
L- 1610 Luxembourg**

R.C.S. Luxembourg B 123052

**Consolidated financial statements
as at December 31, 2016
and
Independent auditor's report**

Spotify Technology S.A.

The company is incorporated in Luxembourg.

Company number: B 123052

Registered office: 42-44, avenue de la Gare
L-1610, Luxembourg

Current directors: Daniel Ek
Martin Lorentzon
Klaus Hommels
Pär-Jörgen Pärsson
Sean Parker
Ted Sarandos
Christopher Marshall

Auditors: Ernst & Young SA
35E, avenue John F. Kennedy
L-1855 Luxembourg
Luxembourg

**SPOTIFY TECHNOLOGY S.A.
SOCIETE ANONYME
REGISTERED OFFICE: 42-44, AVENUE DE LA GARE
L-1610 LUXEMBOURG**

R.C.S. LUXEMBOURG B 123 052

Management report from the Board of Directors on the consolidated financial statements for the year ended December 31, 2016.

Luxembourg, 22 May 2017

Dear Shareholder,

We have called you to a General Meeting with a view to submitting for your approval the consolidated financial statements of Spotify Technology S.A. (the "Company") and its subsidiaries (the "Group" or "Spotify") for the year ended December 31, 2016, which are annexed to this report as an essential component.

This is Spotify

Spotify is a digital music service that provides on-demand access to a catalogue of more than 30 million tracks. Our dream is to make all the world's music available instantly to everyone, wherever and whenever they want it. This is an audacious goal and one that reflects our high ambitions in what we set out to do.

Spotify is available as an ad-supported, free to the user service on all platforms - desktop, tablet and mobile. Spotify premium is our paid-for service and the ultimate music experience. Paying customers are able to listen on-demand and offline on all platforms, in high quality audio, with no ads.

Spotify makes it easy to discover, manage and share music with friends, while making sure that artists, songwriters and other rights holders are fairly compensated. We license and aggregate music from content owners, paying royalties to rights holders who in turn distribute these earnings to the creators of the music – the artists and songwriters themselves. We focus on constantly and consistently innovating to provide the best music product possible, with the overarching objective of driving more people to listen to more music.

We believe people should be able to enjoy music however and wherever they want, so we work with media and platform partners to both market and distribute our service - from media, technology, events and brand partners through to the telecoms, television, speaker hardware and automotive industries.

We believe our model supports profitability at scale. We have already proven that we've created real value for our users, and we know that the more time people spend with our product, the more likely they are to become paying subscribers. We believe we will generate substantial revenues as our reach expands and that, at scale, our margins will improve. We will therefore continue to invest relentlessly in our product and marketing initiatives to accelerate reach.

Music has mass market appeal - and as such, we believe we are just at the beginning of a much larger market opportunity, benefiting from significant first mover advantages. Subscription-only models have not yet proven scale and free user models, whilst scaling, have not proven a path to profitability. Spotify has the combined power of both.

Review of business and results: 2016

Our premium revenue and ad revenue increased 52% and 50%, respectively, year over year, and the number of monthly active users and paying subscribers increased from 91 million at the end of 2015 to approximately 126 million by the end of 2016, and paid subscribers increased from 28 million to 48 million.

We raised \$1 billion from institutional investors. We raised this cash to ensure we have the flexibility to continue to invest and be opportunistic regardless of the state of the capital markets.

Our launch of the global new family plan resulted in strong subscriber growth. However, this strong growth did not materially impact revenue performance in the year as it was partially offset by the price reduction on the existing family plan subscriber base. We also had a strong intake of our holiday and summer campaigns, adding subscribers worldwide, in line with 2015.

During the year we introduced Mobile Overlay ad unit and we now have a full suite of mobile ad offerings from audio, video and display creatives. We also launched sponsored playlists our first truly native ad offering and Programmatic Audio, a first to market global product that completes our programmatic offering from display, video and now audio.

The Group launched in Japan, which is the second biggest music market in the world, which we hope to be a meaningful contributor to revenue and subscribers in the future.

Annual overview	2016	2015	2014
Revenue ('000s)	€ 2,933,504	€ 1,928,548	€ 1,084,788

The Group showed a gross profit of €450.5 million compared to a gross profit last year of €264.5 million. This was primarily attributable to an increase in revenue from €1.9 billion to €2.9 billion.

The Operating loss for the year ending 2016 amounts to €349.4 million compared to €236.3 million last year. This is explained by substantial investments that have been made during the year, mostly in product development, international expansion, and a general increase in personnel.

Our Net loss for the year ending 2016 amounts to €539.2 million compared to €231.4 million last year. The increase over our operating loss primarily relates to the cost of debt and the impact of foreign exchange rates on our debt and investments.

The Group has restated its previously issued consolidated statement of operations, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of changes in equity, and consolidated statement of cash flows at December 31, 2015 and December 31, 2014 and for the years then ended. The Group identified various misstatements relating to prior year financial statements. These errors have been corrected by restating each of the affected financial statement line items for the prior periods. Further information on the restatement are given in note 4 of the consolidated financial statements.

The Company did not repurchase any of its own shares and no dividends were declared during the years 2015 and 2016.

Significant events in 2017

In February 2017, the Group entered into a 17 year operating lease agreement to occupy approximately 380,000 square feet of 4 World Trade Center in New York, New York, United States of America. The total estimated base rent payments over the life of the lease are approximately €480 million. The Group will also incur costs to build out the floors to its specifications. We have committed approximately €26 million for a letter of credit as security on the lease.

Subsequent to year end, the Group completed acquisitions of four privately held companies for cash and stock totaling approximately €39 million.

Subsequent to year end, the Group signed multi-year license agreements with certain music labels and publishers. Included in these agreements are minimum guarantee commitments of approximately €2 billion for royalty payments over the next two years.

Principal risks and uncertainties

Streaming music is an emerging market, which makes it difficult to evaluate our current and future prospects. We face strong competition both for users, listening hours, and advertiser spending, and we face competition from players with substantial resources at their disposal. We depend on acquiring content licenses from a limited number of major and minor content owners and other rights holders in order to provide our service. We are dependent on attracting and retaining users, and on successfully selling advertising and converting users to become paying subscribers, in order to generate sufficient revenue to be profitable. We depend on key personnel to develop great products and services, as well as to operate our business, and if we are unable to retain, attract, and integrate qualified personnel, our ability to successfully grow our business could be harmed. If we cannot maintain Spotify's culture as we grow, we could lose the innovation, teamwork, and focus that contribute crucially to our business.

Financial Risk Management

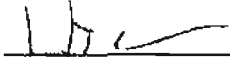
Our operations are exposed to financing and financial risks, which are managed under the control and supervision of the Board of Directors of the Company. To manage these risks efficiently, we have established guidelines in the form of a treasury policy that serves as a framework for the daily financial operations of the Group. The treasury policy stipulates the rules and limitations for the management of financial risks throughout the Group.

Financial risk management is centralized within Group Treasury who is responsible for the management of financing and financial risks. Group Treasury manages and executes the financial management activities, including monitoring the exposure of financial risks, cash management, and maintaining a liquidity reserve, and it provides certain financial services to the entities of the Group. Group Treasury operates within the limits and policies authorized by the Board of Directors.


Further information on financial risks and our management of them are given in note 23 of the consolidated financial statements.

Technology and development

The Group intends to continue making significant investments in developing new products and enhancing the functionality of our existing product. Product development expenses are primarily comprised of costs incurred for development of products related to the Group's platform and service, as well as new advertising products and improvements to the Group's mobile application, website, and streaming services. The costs incurred include related employee compensation and benefits, facility costs, and consulting costs.



Daniel Ek
A Director



Pär-Jürgen Persson
B Director

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Ernst & Young
Société anonyme
35E, Avenue John F. Kennedy
L-1855 Luxembourg
Tel: +352 42 124 1
www.ey.com/luxembourg

B.P. 780
L-2017 Luxembourg
R.C.S. Luxembourg B 47 771
TVA LU 16063074

Independent auditor's report

To the Shareholders of
Spotify Technology S.A.
42-44, avenue de la Gare
L-1610 Luxembourg

Report on the consolidated financial statements

Following our appointment by the General Meeting of the Shareholders dated 21 April 2016, we have audited the accompanying consolidated financial statements of Spotify Technology S.A., which comprise the consolidated statement of financial position as at 31 December 2016, the consolidated statement of operations, the consolidated statement of comprehensive income/(loss), the consolidated statement of changes in equity/(deficit), the consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Board of Directors' responsibility for the consolidated financial statements

The Board of Directors is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as the Board of Directors determines is necessary to enable the preparation and presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Responsibility of the "réviseur d'entreprises agréé"

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier". Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.



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An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the judgement of the "réviseur d'entreprises agréé", including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the "réviseur d'entreprises agréé" considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements give a true and fair view of the financial position of Spotify Technology S.A. as at 31 December 2016, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Note 4 *Correction of errors* which provides details of the impact arising from the restatement of comparative information.

Report on other legal and regulatory requirements

The management report, which is the responsibility of the Board of Directors, is consistent with the consolidated financial statements and has been prepared in accordance with applicable legal requirements.

Ernst & Young
Société anonyme
Cabinet de révision agréé

A handwritten signature in black ink, appearing to read 'Aine Hearty'.

Aine Hearty

Consolidated statement of operations**for the year ended December 31***(in € thousands except per share data)*

	<u>Note</u>	2016	2015 Restated*	2014 Restated*
Revenue	6	2,933,504	1,928,548	1,084,788
Cost of revenue		2,482,973	1,664,085	910,500
Gross profit		450,531	264,463	174,288
Product development		206,853	136,107	114,248
Sales and marketing		417,911	258,723	184,009
General and administrative		175,179	105,926	67,165
		<u>799,943</u>	<u>500,756</u>	<u>365,422</u>
Operating loss		(349,412)	(236,293)	(191,134)
Finance income	9	152,399	35,756	28,539
Finance costs	9	(336,632)	(26,239)	(19,450)
Share in earnings of associates and joint ventures		(2,054)	207	(435)
Finance income/(costs) - net		(186,287)	9,724	8,654
Loss before tax		(535,699)	(226,569)	(182,480)
Income tax expense	10	3,511	4,812	5,642
Net loss attributable to owners of the parent		(539,210)	(231,381)	(188,122)
Net loss per share attributable to owners of the parent				
Basic and diluted	11	<u>(145.38)</u>	<u>(65.20)</u>	<u>(55.99)</u>
Weighted-average ordinary shares outstanding				
Basic and diluted	11	<u>3,709</u>	<u>3,549</u>	<u>3,360</u>

* Refer to note 4.

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income/(loss)**for the year ended December 31***(in € thousands)*

	_ Note	2016	2015 Restated*	2014 Restated*
Net loss attributable to owners of the parent		(539,210)	(231,381)	(188,122)
Other comprehensive income/(loss):				
<i>Items that may be subsequently reclassified to consolidated statement of operations (net of tax):</i>				
Loss in the fair value of available for sale financial assets	23	(4,175)	—	—
Exchange differences on translation of foreign operations		(13,295)	502	1,956
Other comprehensive income/(loss) for the year (net of tax)		(17,470)	502	1,956
Total comprehensive loss for the year attributable to owners of the parent		<u>(556,680)</u>	<u>(230,879)</u>	<u>(186,166)</u>

* Refer to note 4.

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated statement of financial position**As at December 31***(in € thousands)*

	Note	2016	2015 Restated*	As at January 1, 2015
Assets				
Non-current assets				
Property and equipment	12	84,839	81,094	50,710
Intangible assets including goodwill	13	79,752	73,151	58,529
Investment in associates and joint ventures	26	—	1,430	—
Restricted cash	14	21,170	19,956	9,310
Other non-current assets		1,728	458	740
Deferred tax assets	10	3,177	4,470	3,906
		190,666	180,559	123,195
Current assets				
Trade and other receivables	15	299,654	244,298	135,483
Income tax receivable	10	5,841	2,780	1,036
Short term investments	23	830,285	—	—
Cash and cash equivalents	23	754,904	597,392	206,492
Other current assets		17,897	25,773	8,142
		1,908,581	870,243	351,153
Total assets		2,099,247	1,050,802	474,348
(Deficit)/Equity and liabilities				
(Deficit)/Equity				
Share capital	16	94	91	85
Other paid in capital	16	829,608	796,853	404,153
Other reserves	16	121,629	85,451	55,024
Accumulated deficit		(1,193,713)	(654,503)	(423,122)
(Deficit)/Equity attributable to owners of parent		(242,382)	227,892	36,140
Non-current liabilities				
Convertible notes	18, 23	1,106,354	—	—
Accrued expenses and other liabilities	21	10,000	16,130	11,690
Provisions	22	3,660	8,331	2,090
Deferred tax liabilities	10	49	—	160
		1,120,063	24,461	13,940
Current liabilities				
Trade and other payables	19	201,464	119,141	105,952
Income tax payable	10	5,675	5,338	11,509
Deferred revenue	20	150,646	91,894	62,688
Accrued expenses and other liabilities	21	672,766	484,554	221,374
Provisions	22	57,350	15,142	16,139
Derivative liabilities	23	133,665	82,380	6,606
		1,221,566	798,449	424,268
Total liabilities		2,341,629	822,910	438,208
Total (deficit)/equity and liabilities		2,099,247	1,050,802	474,348

* Refer to note 4.

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity/(deficit)*(in € thousands, except share information)*

	Note	Number of ordinary shares	Share capital	Other paid in Capital	Other Reserves	Accumulated Deficit	(Deficit)/Equity Attributable to Owners of Parent
Balance at January 1, 2014		3,237,576	81	293,519	35,364	(227,418)	101,546
Adjustment on correction of errors (net of tax)	4	—	—	—	(10)	(7,582)	(7,592)
Balance at January 1, 2014, as restated*		3,237,576	81	293,519	35,354	(235,000)	93,954
Loss for the year		—	—	—	—	(188,122)	(188,122)
Other comprehensive income		—	—	—	1,956	—	1,956
Issuance of shares upon exercise of stock options	16	29,117	1	7,593	—	—	7,594
Issuance of shares, net of costs	16	66,225	2	58,425	—	—	58,427
Issue of ordinary shares related to business combination	5	61,897	1	44,571	—	—	44,572
Share-based payments	17	—	—	45	17,125	—	17,170
Income tax impact associated with share-based payments	10	—	—	—	589	—	589
Balance at December 31, 2014, as restated*		3,394,815	85	404,153	55,024	(423,122)	36,140
Loss for the year		—	—	—	—	(231,381)	(231,381)
Other comprehensive income		—	—	—	502	—	502
Issuance of shares upon exercise of stock options and restricted stock units	16	20,574	—	6,019	—	—	6,019
Issuance of shares, net of costs	16	237,122	6	386,681	—	—	386,687
Share-based payments	17	—	—	—	28,633	—	28,633
Income tax impact associated with share-based payments	10	—	—	—	1,292	—	1,292
Balance at December 31, 2015, as restated*		3,652,511	91	796,853	85,451	(654,503)	227,892
Loss for the year		—	—	—	—	(539,210)	(539,210)
Other comprehensive loss		—	—	—	(17,470)	—	(17,470)
Issuance of shares upon exercise of stock options and restricted stock units	16	95,589	3	32,755	—	—	32,758
Share-based payments	17	—	—	—	53,360	—	53,360
Income tax impact associated with share-based payments	10	—	—	—	288	—	288
Balance at December 31, 2016		3,748,100	94	829,608	121,629	(1,193,713)	(242,382)

* Refer to note 4.

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated statement of cash flows**for the year ended December 31***(in € thousands)*

	Note	2016	2015 Restated*	2014 Restated*
Operating activities				
Net loss		(539,210)	(231,381)	(188,122)
Adjustments to reconcile net loss to net cash flows				
Depreciation of property and equipment	12	32,244	25,973	15,730
Amortization of intangible assets	13	5,665	4,157	3,423
Share-based payment transaction expense	17	52,880	28,149	16,976
Impairment loss on trade receivables	15	18,369	6,693	3,252
Loss on disposal of equipment	12	842	—	359
Finance income	9	(152,399)	(35,756)	(28,539)
Finance costs	9	336,632	26,239	19,450
Income tax expense	10	3,511	4,812	5,642
Share in earnings of associates and joint ventures		2,054	(207)	435
Net foreign exchange (gains)/losses		42,028	(33,098)	(35,260)
Changes in working capital:				
Increase in trade receivables and other assets		(63,282)	(128,489)	(39,502)
Increase in trade and other liabilities		243,895	250,608	161,249
Increase/(decrease) in deferred revenue		77,862	26,355	(4,881)
Increase in provisions		38,079	20,456	444
Interest received		4,883	1,501	1,356
Interest paid		(214)	(630)	(1,857)
Income tax paid		(4,019)	(3,508)	(3,673)
Net cash flows from/(used in) operating activities		99,820	(38,126)	(73,518)
Investing activities				
Business combinations, net of cash acquired	5	(6,580)	(7,259)	(2,053)
Investment in associates and joint ventures	26	(624)	(479)	—
Purchase of equipment	12	(26,555)	(44,254)	(15,649)
Purchase of intangibles	13	(3,042)	(4,958)	—
Purchase of short term investments	23	(1,397,225)	—	—
Sales and maturities of short term investments	23	608,505	—	—
Change in restricted cash	14	(771)	(10,395)	(3,688)
Change in other non-current assets		—	—	167
Net cash flows used in investing activities		(826,292)	(67,345)	(21,223)
Financing activities				
Finance lease payments		(5,356)	(4,434)	(801)
Proceeds from issuance of convertible notes, net of costs	18	861,301	—	—
Proceeds from issuance of new shares, net of costs	16	—	474,476	58,427
Proceeds from the issuance of warrants	16	26,872	—	—
Proceeds from exercise of share options	17	32,758	6,019	7,594
Net cash flow from financing activities		915,575	476,061	65,220
Net increase/(decrease) in cash and cash equivalents		189,103	370,590	(29,521)
Cash and cash equivalents at January 1	23	597,392	206,492	217,968
Net exchange gains/(losses) on cash and cash equivalents		(31,591)	20,310	18,045
Cash and cash equivalents at December 31	23	754,904	597,392	206,492

* Refer to note 4.

The accompanying notes are an integral part of these consolidated financial statements

1. Corporate information

Spotify Technology S.A. (the “Company”) is a private limited company incorporated and domiciled in Luxembourg. On March 15, 2016 the Company moved its registered office from 18, Rue de l’Eau, L-1449, Luxembourg to 42-44 avenue de la Gare, L1610, Luxembourg.

The principal activity of the Company and its subsidiaries (the “Group”) is the operation of a digital music and media platform providing instant access to millions of songs through high-quality mobile, tablet, desktop, and other device applications including game consoles, car audio systems, and connected speakers. Consumers can download the Spotify application to access a catalog of music and non-music content through a unique streaming protocol. Spotify is available either as a free-to-user, ad-supported service, or as a paid-for subscription service. The Group depends on acquiring content licenses from a number of major and minor content owners and other rights holders in order to provide its service.

The consolidated financial statements of the Group for the year ended December 31, 2016 were authorized for issue with a resolution of the directors on May 22, 2017. Under Luxembourg law the consolidated financial statements are approved by the shareholders at the annual general meeting.

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

(a) Basis of preparation

The consolidated financial statements of Spotify Technology S.A. have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”). The consolidated financial statements are also in compliance with IFRS as endorsed by the European Union (“EU”) for all periods presented.

The consolidated financial statements have been prepared on a historical cost basis, except for available for sale securities, convertible senior notes (“convertible notes”), and derivative financial instruments, which have been measured at fair value. The preparation of the consolidated financial statements in conformity with IFRS requires the application of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group’s accounting policies. The areas involving a greater degree of judgment or complexity, or areas in which assumptions and estimates are significant to the consolidated financial statements, are disclosed in note 3.

The consolidated financial statements provide comparative information in respect of the previous periods. Further, the Group presents an additional statement of financial position at the beginning of the earliest period presented when there is a retrospective application of an accounting policy, a retrospective restatement, or a reclassification of items in the consolidated financial statements. An additional statement of financial position as of January 1, 2015 is presented in these consolidated financial statements due to the correction of errors retrospectively. See note 4.

(b) Basis of consolidation

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

(c) Investment in associates and joint ventures

An associate is an entity over which the Group has significant influence but not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Notes to the 2016 consolidated financial statements

The Group accounts for its investments in associated companies and joint ventures using the equity method whereby the investment is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the associates and joint ventures since the acquisition date.

The Group determines, at each reporting date, whether there is objective evidence that its investment in its associated companies or joint ventures are impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount and the carrying amount of the investment. Any gain or loss resulting from the dilution of the Group's interest in associates and joint ventures where significant influence and joint control, respectively, is retained is recognized in the consolidated statement of operations in "Share in earnings of associates and joint ventures."

(d) Foreign currency translation

Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates. The consolidated financial statements are presented in Euro, which is the Group's presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are recognized in the consolidated statement of operations within finance income or finance costs.

Group companies

The results and financial position of all the Group entities that have a functional currency different from the presentation currency are translated into Euro as follows:

- Assets and liabilities are translated at the closing rate at the reporting date;
- Income and expenses for each statement of operation are translated at average exchange rates, and
- All resulting exchange differences are recognized in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the operation and translated at the closing rate at each reporting date.

(e) Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of services in the ordinary course of the Group's activities. Revenue is shown net of applicable value-added tax, sales tax, refunds, rebates, and discounts.

The Group recognizes revenue when all of the following conditions have been satisfied:

- the amount of revenue can be measured reliably;
- it is probable that future economic benefits associated with the transaction will flow to the Group;
- the stage of completion of the transaction at the end of the reporting period can be measured reliably; and
- the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

In certain instances, revenue recognition is impacted by estimates of relative selling prices as well as estimates of allowances, discounts, and rebates. These estimates are supported by historical data. While management believes that the estimates used are appropriate, differences in actual experience or changes in estimates may affect the Group's future results.

Notes to the 2016 consolidated financial statements

Subscription revenue

The Group generates subscription revenue from the sale of premium services comprising unlimited music streaming without advertisements. Premium services are sold to direct subscribers and to partners who are generally telecommunications companies that bundle the subscription with their own services or collect payment for the standalone subscriptions from their end customers.

Direct premium services are based on a flat fee and are paid in advance. Premium services collected through third parties are based on a flat fee and are paid in arrears. Revenue from these services is recognized on a straight-line basis over the subscription period.

Premium partner services are based on a per-subscriber rate in a negotiated partner agreement and may include minimum guarantees for the number of subscriptions that will be purchased from the Group. For partner agreements where the minimum guarantee is not met, revenue for the difference between the actual subscriptions purchased and minimum commitment amount is not recognized until the end of the term. Minimum non-refundable guarantees paid in advance and other advance payments are deferred and recognized based on the number of actual premium partner subscribers.

Advertising revenue

The Group's advertising revenue is primarily generated through display, audio, and video advertising delivered through advertising impressions. The Group enters into arrangements with advertising agencies that purchase advertising on the Group's platform on behalf of the agencies' clients. These advertising arrangements are typically sold on a cost per thousand basis and are evidenced by an Insertion Order ("IO") that specifies the terms of the arrangement such as the type of ad product, pricing, insertion dates, and number of impressions in a stated period. Revenue is recognized upon delivery of impressions on a proportionate performance basis.

Additionally, the Group generates revenue through arrangements with certain supplier support platforms to distribute advertising inventory on their ad exchange platforms for purchase on a cost per thousand basis. Revenue is recognized when impressions are delivered on the platform.

Barter transactions

The Group enters into barter transactions involving advertising services and follows IAS 18, *Revenue* and SIC 31, *Revenue – Barter Transactions Involving Advertising Services*. Such barter transactions should only be recognized if the fair value of the consideration received can be measured reliably. The Group did not recognize revenue and expenses for advertising barter transactions as the transactions are considered mutually beneficial to both parties and/or the fair value of the consideration received cannot be measured reliably.

Gross versus net

The Group reports revenue on a gross or net basis based on management's assessment of whether it acts as a principal or agent in the transaction. To the extent the Group acts as the principal, revenue is reported on a gross basis. The determination of whether the Group acts as a principal or an agent in a transaction is based on an evaluation of whether it has the substantial risks and rewards associated with the rendering of services under the terms of an arrangement.

Deferred revenue

Deferred revenue is mainly comprised of subscription fees collected that have not been recognized and services in which the applicable revenue recognition criteria have not been met.

Accrued premium revenue

Accrued premium revenue relates to the sale of subscriptions to Partner Subscribers or amounts due from third parties who collect on the Group's behalf, which are invoiced and paid in arrears. Revenue is recognized as the services are performed.

(f) Business Combinations

Business combinations are accounted for using the acquisition method. Identifiable assets acquired and liabilities assumed are measured initially at their fair values at the acquisition date.

Notes to the 2016 consolidated financial statements

The excess of the consideration transferred, and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recognized as goodwill.

Acquisition-related costs, other than those incurred for the issuance of debt or equity instruments, are charged to the consolidated statement of operations as they are incurred.

(g) Cost of revenue

Cost of revenue consists primarily of royalty and distribution costs related to content streaming. The Group incurs royalty costs paid to certain music record labels and other rights holders for the right to stream music to the Group's users. Royalties are calculated using negotiated rates in accordance with master license agreements and are based on either subscription and advertising revenue earned or user/usage measures or a combination of these. The Group has certain arrangements whereby royalty costs are paid in advance or are subject to minimum guaranteed amounts. An accrual is established when actual royalty costs to be incurred during a contractual period are expected to fall short of the minimum guaranteed amounts. For minimum guarantee arrangements for which the Group cannot reliably predict the underlying expense, the Group will expense the minimum guarantee on a straight-line basis over the term of the arrangement. The Group also has certain royalty arrangements where it would have to make additional payments if the royalty rates were below those paid to other similar licensors (most favored nation clauses). An accrual and expense is recognized when it is probable that the Group will make additional royalty payments under these terms. The expense related to these accruals is recognized in cost of revenue. Cost of revenue also includes credit card and payment processing fees for subscription revenue, customer service, certain employee compensation and benefits, and facility and equipment costs.

(h) Product development expenses

Product development expenses are primarily comprised of costs incurred for development of products related to the Group's platform and service, as well as new advertising products and improvements to the Group's mobile application, desktop, and streaming services. The costs incurred include related employee compensation and benefits, facility costs, and consulting costs.

(i) Sales and marketing expenses

Sales and marketing expenses are primarily comprised of employee compensation and benefits, events and trade shows, public relations, branding, consulting expenses, customer acquisition costs, advertising, the cost of working with record labels and artists to promote the availability of new releases on the Group's platform, and the costs of providing free and discounted trials of the premium service.

(j) General and administrative expenses

General and administrative expenses are comprised primarily of employee compensation and benefits for functions such as finance, accounting, analytics, legal, human resources, consulting fees, and other costs including facility and equipment costs.

(k) Income tax

The tax expense for the period comprises current and deferred tax. Tax is recognized in the consolidated statement of operations except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

(i) Current tax

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to tax payable or receivable in respect of previous years. It is measured using tax rates enacted or substantively enacted at the reporting date.

(ii) Deferred tax

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for:

- Temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss;

Notes to the 2016 consolidated financial statements

- Temporary differences related to investments in subsidiaries, associates, and joint ventures to the extent that the Group is able to control the timing of the reversal of the temporary differences, and it is probable that they will not reverse in the foreseeable future; and
- Taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax assets are recognized for unused tax losses, unused tax credits, and deductible temporary differences to the extent that it is probable that future taxable profits will be available, against which they can be used. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date. The measurement of deferred tax reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if certain criteria are met.

(iii) Uncertain tax positions

In determining the amount of current and deferred income tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes, interest or penalties may be due. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes the Group to change its judgment regarding the adequacy of existing tax liabilities. Such changes to tax liabilities will impact tax expense in the period that such a determination is made.

(l) Property and equipment

Property and equipment are stated at historical cost less accumulated depreciation and any accumulated impairment losses. Historical cost includes any expenditure that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by the Group.

The Group adds to the carrying amount of an item of property and equipment the cost of replacing parts of such an item if the replacement part is expected to provide incremental future benefits to the Group. All repairs and maintenance are charged to the consolidated statement of operations during the period in which they are incurred.

Depreciation is charged so as to allocate the cost of assets less their residual value over their estimated useful lives, using the straight-line method as follows:

- Property and equipment: 3 to 5 years
- Leasehold improvements: shorter of the lease term or useful life

The assets' residual values, useful lives, and depreciation methods are reviewed annually and adjusted prospectively if there is an indication of a significant change. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in the consolidated statement of operations when the asset is derecognized.

(m) Intangible assets

Acquired intangible assets other than goodwill comprise acquired developed technology and patents. At initial recognition, intangible assets acquired in a business combination are recognized at their fair value as of the date of acquisition. Following initial recognition, intangible assets are carried at cost less accumulated amortization and impairment losses.

The Group recognizes internal development costs as intangible assets only when the following criteria are met: the technical feasibility of completing the intangible asset exists, there is an intent to complete and an ability to use or sell the intangible asset, the intangible asset will generate probable future economic benefits, there are adequate resources available to complete the development and to use or

Notes to the 2016 consolidated financial statements

sell the intangible asset, and there is the ability to reliably measure the expenditure attributable to the intangible asset during its development.

Intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives, typically 2 to 5 years and are assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset are reviewed at least annually. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization of intangible assets is recognized in the consolidated statement of operations in the expense category consistent with the function of the intangible assets.

(n) Goodwill

Goodwill is the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. Goodwill is tested annually for impairment or more regularly if certain indicators are present. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("CGUs") that are expected to benefit from the synergies of the combination and represent the lowest level at which the goodwill is monitored for internal management purposes. Goodwill is evaluated for impairment by comparing the recoverable amount of the Group's CGUs to the carrying amount of the CGU to which the goodwill relates. If the recoverable amount is less than the carrying amount an impairment charge is determined.

The recoverable amount of the CGUs is based on fair value less costs of disposal. The Group believes reasonable estimates and judgments have been used in assessing the recoverable amounts.

(o) Impairment of non-financial assets

Assets that are subject to depreciation or amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. An impairment loss is recognized in the consolidated statement of operations consistent with the function of the assets, for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows. Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal each reporting period.

(p) Financial instruments

(i) Financial assets

Initial recognition and measurement

The Group's financial assets are comprised of cash and cash equivalents, short term investments, trade and other receivables, restricted cash, and other non-current assets. All financial assets are recognized initially at fair value plus transaction costs that are attributable to the acquisition of the financial asset. Purchases and sales of financial assets are recognized on the settlement date; the date that the Group receives or delivers the asset. The Group classifies its financial assets primarily as cash and cash equivalents, receivables and available for sale financial assets. Receivables are non-derivative financial assets, other than short term investments described below, with fixed or determinable payments that are not quoted in an active market. They are included in current assets except for those with maturities greater than 12 months after the reporting period.

For more information on receivables, refer to note 15.

Short term investments classified as available for sale financial assets are those that are neither classified as held for trading nor designated at fair value through the consolidated statement of operations. The securities in this category are those that are intended to be held for an indefinite period of time and that may be sold in response to needs for liquidity or in response to changes in the market conditions (therefore not recognized at amortized cost). These are classified as current assets.

Subsequent measurement

After initial measurement, available for sale financial assets are measured at fair value with unrealized gains or losses recognized in other comprehensive income and credited in other reserves within equity until the investment is derecognized, at which time, the cumulative gain or loss is recognized in finance income/costs, or the investment is determined to be impaired, when the cumulative loss is reclassified from the available for sale reserve to the consolidated statement of operations in finance costs. Interest earned whilst holding available for sale financial assets is reported as interest income using the effective interest method.

Notes to the 2016 consolidated financial statements*Derecognition*

Financial assets are derecognized when the rights to receive cash flows from the asset have expired, or the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full.

Impairment of financial assets

The Group assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset is considered impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flow of that asset. Evidence of impairment include that debtors, individually or collectively, default in payments or other indications that they experience significant financial difficulty, including the probability of entering bankruptcy or other financial reorganization, or a significant or prolonged decline in the fair value of an investment below its cost. 'Significant' is evaluated against the original cost of the investment and 'prolonged' against the period in which the fair value has been below its original cost.

If there is evidence of impairment for any of the Group's financial assets carried at amortized cost, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the consolidated statement of operations.

In the case of investments classified as available for sale, the impairment is assessed based on the same criteria as financial assets carried at amortized cost. However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognized in the consolidated statement of operations. Future interest income continues to be accrued based on the reduced carrying amount of the asset, using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of finance income.

For impairment losses recognized, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the reversal of the previously recognized impairment loss is recognized in the consolidated statement of operations.

(ii) Financial liabilities*Initial recognition and measurement*

The Group's financial liabilities are comprised of trade and other payables, other liabilities (borrowings and finance lease payments), convertible notes, and derivative liabilities (contingent options and warrants). All financial liabilities are recognized initially at fair value and, in the case of convertible notes and borrowings, net of directly attributable transaction costs.

The Group accounts for the convertible notes in accordance with IAS 39, *Financial Instruments: Recognition and Measurement*, 'fair value option'. Under this approach, the convertible notes are accounted for in their entirety at fair value, with any change in fair value after initial measurement being recorded in the consolidated statement of operations and the transaction costs are effectively immediately expensed.

The Group accounts for its warrants as a financial liability at fair value. In accordance with IAS 32, *Financial Instruments: Presentation*, the Group determined that the warrants were precluded from equity classification, because while they contain no contractual obligation to deliver cash or other financial instruments to the holders other than the Company's own shares, the exercise price of the warrants are in US\$ and not the Company's functional currency. Therefore, the warrants do not meet the requirements that they be settled by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments.

*Subsequent measurements**Other financial liabilities*

After initial recognition, payables and borrowings are subsequently measured at amortized cost using the effective interest rate ("EIR") method. The EIR amortization is included in finance costs in the consolidated statement of operations. Gains and losses are recognized in the consolidated statement of operations when the liabilities are derecognized.

Payables and borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

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Fees paid to secure loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. The fee is deferred until the drawdown occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as pre-payment for liquidity services and amortized over the period of the facility.

Financial liabilities at fair value through profit or loss

After initial recognition, financial liabilities at fair value through the profit or loss are subsequently remeasured at fair value at the end of each reporting period with changes in fair value recognized in finance income or finance costs in the consolidated statement of operations.

Derecognition

Financial liabilities are derecognized when the obligation under the liability is discharged, cancelled, or expires.

(iii) Fair Value Measurements

For financial assets and liabilities measured at fair value on a recurring basis, fair value is the price the Group would receive to sell an asset or pay to transfer a liability in an orderly transaction with a market participant at the measurement date. In the absence of active markets for identical assets or liabilities, such measurements involve developing assumptions based on market observable data and, in the absence of such data, internal information that is consistent with what market participants would use in a hypothetical transaction that occurs at the measurement date. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Group's market assumptions. All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: other techniques for which inputs are based on quoted prices for identical or similar instruments in markets that are not active, quoted prices for similar instruments in active markets, and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the asset or liability
- Level 3: techniques which use inputs that have a significant effect on the recognized fair value that are not based on observable market data

The Group maintains policies and procedures to determine the fair value of financial assets and liabilities using what it considers to be the most relevant and reliable market participant data available. In determining the fair value of financial assets and liabilities employing Level 3 inputs, the Group considers such factors as the current interest rate, equity market, currency and credit environments, expected future cash flows, the probability of certain future events occurring, and other published data. The Group performs a variety of procedures to assess the reasonableness of its fair value determinations including the use of third parties.

(q) Cash and cash equivalents

Cash and cash equivalents comprise cash on deposit at banks and on hand and short term deposits with a maturity of three months or less from the date of purchase that are not subject to restrictions. Cash deposits that have restrictions governing their use are classified as restricted cash, current or non-current, based on the remaining length of the restriction.

The Group classifies highly liquid investments with maturities of three months or less at the date of purchase as cash equivalents.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short term deposits as defined above.

(r) Short term investments

Starting April 2016, the Group invests in a variety of instruments, such as commercial paper, money market funds, corporate debt securities, collateralized reverse purchase agreements, and government and government agency debt securities. Part of these investments are held in short duration fixed income portfolios. The average duration of these portfolios is two years. All investments are governed by an investment policy and are held in highly-rated counterparties. Separate credit limits are assigned to each counterparty in order to minimize risk concentration.

Notes to the 2016 consolidated financial statements

These investments are classified as available for sale securities and are carried at fair value with the unrealized gains and losses reported as a component of equity. Management determines the appropriate classification of investments at the time of purchase and reevaluates the available for sale designations as of each reporting date. The available for sale debt securities with maturities greater than twelve months are classified as short term when they are intended for use in current operations. The cost basis for investments sold is based upon the specific identification method.

(s) Share capital

Ordinary shares are classified as equity.

Equity instruments are initially measured at the fair value of the cash or other resources received or receivable, net of the direct costs of issuing the equity instruments.

For the years ended December 31, 2015, 2013 and 2012, the Group issued equity instruments that were part of a compound transaction whereby additional shares would be issued to the shareholders upon the occurrence of certain events (see note 16). The embedded derivatives were separated from the host contract and the resulting derivative liabilities were initially measured at fair value. The derivative liabilities are remeasured at fair value through the consolidated statement of operations at each reporting period. The difference between the consideration received for the equity instruments and the fair value of the embedded derivatives represents the equity components of the transaction. Transaction costs are allocated to the liability derivatives and equity components in proportion to their initial carrying amounts.

(t) Share-based payments

Employees of the Group receive remuneration in the form of share-based payment transactions, whereby employees render services in consideration for equity instruments.

The cost of equity-settled transactions with employees is determined by the fair value at the date of grant using an appropriate valuation model. The cost is recognized, together with a corresponding credit to other reserves in equity over the period in which the performance and service conditions are fulfilled. The cost of equity-settled transactions with non-employees for which services are rendered over a vesting period is determined by the average fair value over the period the services are received.

The cumulative expense recognized for equity-settled transactions with employees at each reporting date until the vesting date reflects the Group's best estimate of the number of equity instruments that will ultimately vest. The expense for a period represents the movement in cumulative expense recognized at the beginning and end of that period, and is recognized in employee share-based payments. When the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified, if the original terms of the award are met. An additional expense is recognized for modification that increases the total fair value of the share-based payment transaction or is otherwise beneficial to the grantee as measured at the date of modification. There have been no material modifications to any share-based payment transactions during 2016, 2015, and 2014.

Social costs are payroll taxes associated with employee salaries and benefits, including share based compensation. Social costs in connection with the grant are accrued over the vesting period based on the intrinsic value of the award that has been earned at the end of each reporting period. The amount of the liability reflects the amortization of the award and the impact of expected forfeitures. The social cost rate at which the accrual is made follows the tax domicile within which other compensation charges for a grantee are recognized.

The assumptions and models used for estimating fair value for share based payment transactions are disclosed in note 17.

(u) Employee benefits

The Group provides defined contribution plans to its employees. The Group pays contributions to publicly and privately administered pension insurance plans on a mandatory or contractual basis. The Group has no further payment obligations once the contributions have been paid. Contributions to defined contribution plans are expensed when employees provide services. The Group's post-employment schemes do not include any defined benefit plans.

Notes to the 2016 consolidated financial statements

(v) Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

(w) Leases

At inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The Group leases certain items of property and equipment. Leases in which substantially all the risks and rewards of ownership are not transferred to the Group as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the consolidated statement of operations on a straight-line basis over the period of the leases.

Leases of property and equipment where the Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the lease's commencement at lower of the fair value of the leased property and the present value of the minimum lease payments. Each lease payment is allocated between the repayment of the liability and finance charges. The corresponding lease obligations, net of finance charges, are included in borrowings. The interest element of the finance cost is charged to the consolidated statement of operations over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property and equipment acquired under finance leases is depreciated over the shorter of the useful life of the asset and the lease term.

New and amended standards and interpretations adopted by the Group

None of the new or revised standards and interpretations adopted for the first time on January 1, 2016 had a material impact on the consolidated financial statements of the Group.

New standards and interpretations issued not yet effective

Recently issued new or revised/amended standards and interpretations effective for the Group on or after January 1, 2017, are as follows:

In July 2014, the IASB published the final version of IFRS 9, *Financial Instruments*, which reflects all phases of the financial instruments project and replaces IAS 39, *Financial Instruments: Recognition and Measurement*, and all previous versions of IFRS 9, *Financial Instruments*. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. IFRS 9 is effective for annual periods beginning on or after January 1, 2018, with early application permitted. Retrospective application is required, but comparative information is not compulsory. The EU has endorsed the standard in November 2016. The Group is assessing the impact of IFRS 9, *Financial Instruments*.

In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers*, which deals with revenue recognition and establishes principles for reporting useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from an entity's contracts with customers. Revenue is recognized when a customer obtains control of a good or service and thus has the ability to direct the use and obtain the benefits from the good or service. The standard replaces IAS 18, *Revenue*, and IAS 11, *Construction Contracts*, and related interpretations. The standard is effective for annual periods beginning on or after January 1, 2018 and earlier application is permitted. The EU has endorsed the standard in September 2016. The Group is currently in the process of evaluating the impact of the adoption of IFRS 15, *Revenue from Contracts with Customers*, and the transition alternatives on its consolidated financial statements. The Group has completed its assessment on the majority of its revenue transactions and do not believe there will be a material impact on direct subscription revenue recognition. The Group is continuing to evaluate the impact of the standard on certain transactions, as well as the impact on its business processes, systems, and controls. The Group expects to complete its evaluation during 2017, and will continue evaluation of IFRS 15, including how it may impact new arrangements it enters into as well as new or emerging interpretations of the standard, through to the date of adoption.

In January 2016, the IASB published IFRS 16, *Leases*, its new leasing standard which will replace the current guidance in IAS 17, *Leases*, and interpretations IFRIC 4, SIC-15 and SIC-27. The new standard requires lessees to recognize a lease liability reflecting future lease payments and a 'right-of-use asset' for virtually all lease contracts. The standard applies to annual periods beginning on or after January 1, 2019, with earlier application permitted. The EU has not yet endorsed the standard. The Group expects the valuation of right-of-use assets and lease liabilities, previously described as operating leases, to be the present value of its forecasted future lease commitments. Lessees will be required to separately recognize the interest expense on the lease liability and the depreciation

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expense on the right-of-use asset. The Group is continuing to assess the overall impacts of the new standard, including the discount rate to be applied in these valuations.

In January 2016, the IASB issued *Disclosure Initiative (Amendments to IAS 7)* which amended IAS 7, *Statement of Cash Flows*. The amendments require entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities. The amendments apply to annual periods beginning on or after January 1, 2017, with earlier application permitted. When the entity first applies those amendments, it is not required to provide comparative information for preceding periods. The EU has not endorsed the amendments yet. The Group is assessing what information it has to provide to comply with the amendments to IAS 7, *Statement of Cash Flows*.

In January 2016, the IASB issued *Recognition of Deferred Tax Assets for Unrealised Losses (Amendments to IAS 12)* which amended IAS 12, *Income Taxes*. The amendments primarily were issued to clarify the recognition of deferred tax assets for unrealized losses related to debt instruments measured at fair value. An entity shall apply these amendments for annual reporting periods beginning on or after January 1, 2017, with early application permitted. The EU has not endorsed the amendments yet. The Group is assessing the impact of the amendments to IAS 12, *Income Taxes*.

There are no other IFRS or IFRIC interpretations that are not effective, that are expected to have a material impact on the Group.

3. Critical accounting estimates and judgments

The preparation of the consolidated financial statements requires management to make judgments, estimates, and assumptions that affect the reported amounts of revenues, expenses, assets, and liabilities in the consolidated financial statements and the accompanying disclosures. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events.

Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

The areas where assumptions and estimates are significant to the consolidated financial statements are:

- (i) Share-based payments – the Group measures the cost of equity-settled transactions with employees and non-employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is estimated using a model which requires the determination of the appropriate inputs. The assumptions and models used for estimating the fair value of share-based payment transactions are disclosed in note 17.
- (ii) Convertible notes, warrants, and embedded derivatives in equity transactions – the fair value of the Group's convertible notes, warrants, and derivatives are estimated using valuation techniques using inputs based on management's judgment and conditions that existed at each reporting date. The assumptions and models used for estimating the fair value of the instruments are disclosed in note 23.
- (iii) The group has fiscal loss carryforwards. At period end, the group investigates the possibility of capitalizing deferred tax assets with regard to the loss carryforwards. Deferred tax assets related to loss carry-forwards are recognized only in those cases where it is probable and there is objective evidence that the Group will generate future taxable income to which the loss carryforward can be utilized. See note 10.
- (iv) The Group allocates the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. See note 5.
- (v) In accordance with the accounting policy described in note 13, Intangible assets, the Group annually performs an impairment test regarding goodwill. The fair value of the CGUs are estimated using valuation techniques using inputs based on management's judgment and conditions that existed at the testing date. The assumptions and models used for estimating the fair value are disclosed in note 13.
- (vi) Royalties – the Group's agreements and arrangements with rights holders for the content used on its platform are complex. Some rights holders have allowed the use of their content on the platform while negotiations of the terms and

Notes to the 2016 consolidated financial statements

conditions are ongoing. The determination of royalties' payable to rights holders also involves certain significant judgments, assumptions, and estimates of the amounts to be paid. See note 21.

- (vii) Management makes significant estimates and assumptions when determining the amounts to record for provision for legal contingencies. See note 22.

The areas requiring a higher degree of judgment in applying accounting principles or complexity are:

- (i) Equity arrangements – the Group determined that three of its equity arrangements included embedded derivatives due to the existence of a downside protection clause. The evaluation of the embedded derivatives for separation from the equity instrument required significant judgment and the consideration of whether the embedded derivative was closely related to the host contract. See notes 16 and 23.

4. Correction of errors

The Group has restated its previously issued consolidated statement of operations, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of changes in equity, and consolidated statement of cash flows at December 31, 2015 and December 31, 2014 and for the years then ended. The Group identified various misstatements relating to prior year consolidated financial statements. These errors have been corrected by restating each of the affected financial statement line items for the prior periods. The individual misstatements that underlie the restatement adjustments are described below and are reflected and quantified, as applicable, in the footnotes to the below tables. Certain items in the prior year reported figures have been reclassified for current year presentation purposes. Some restatement adjustments also affect periods prior to 2014.

Impact on consolidated statement of operations

	As previously reported 2015	Restatement adjustments	Ref (in € thousands)	Reclassification adjustments	Ref	As restated 2015
Revenue	1,945,332	(6,945)	(a)	(9,839)	(j)	1,928,548
Cost of revenue	1,623,624	34,257	(b),(c)	6,204	(j)	1,664,085
Gross profit	321,708	(41,202)		(16,043)		264,463
Product development	143,307	4,738	(d),(e),(f)	(11,938)	(j)	136,107
Sales and marketing	246,486	(1,540)	(d),(e)	13,777	(j)	258,723
General and administrative	116,405	7,403	(d),(c),(f)	(17,882)	(j)	105,926
	506,198	10,601		(16,043)		500,756
Operating loss	(184,490)	(51,803)		—		(236,293)
Finance income	28,172	—		7,584	(j)	35,756
Finance costs	(11,086)	(7,569)	(g)	(7,584)	(j)	(26,239)
Share in earnings of associates and joint ventures	2,640	(2,433)	(h)	—		207
Finance income/(costs) - net	19,726	(10,002)		—		9,724
Loss before tax	(164,764)	(61,805)		—		(226,569)
Income tax expense	8,333	(3,521)	(i)	—		4,812
Net loss attributable to owners of the parent	(173,097)	(58,284)		—		(231,381)

Notes to the 2016 consolidated financial statements

	As previously reported 2014	Restatement adjustments	Ref	Reclassification adjustments (in € thousands)	Ref	As restated 2014
Revenue	1,081,720	500		2,568	(j)	1,084,788
Cost of revenue	876,089	26,440	(b)	7,971	(j)	910,500
Gross profit	205,631	(25,940)		(5,403)		174,288
Product development	121,030	—		(6,782)	(j)	114,248
Sales and marketing	173,013	23		10,973	(j)	184,009
General and administrative	76,678	81		(9,594)	(j)	67,165
	370,721	104		(5,403)		365,422
Operating loss	(165,090)	(26,044)		—		(191,134)
Finance income	25,512	—		3,027	(j)	28,539
Finance costs	(18,563)	2,140	(g)	(3,027)	(j)	(19,450)
Share in earnings of associates and joint ventures	(438)	3		—		(435)
Finance income/(costs) - net	6,511	2,143		—		8,654
Loss before tax	(158,579)	(23,901)		—		(182,480)
Income tax expense	3,678	1,964	(i)	—		5,642
Net loss attributable to owners of the parent	(162,257)	(25,865)		—		(188,122)

Impact on comprehensive income increase/(decrease)

	2015	2014
	(in € thousands)	
Exchange differences on translation of foreign operations	71	562
Impact on comprehensive income for the year attributable to owners of the parent	71	562

Notes to the 2016 consolidated financial statements

Impact on statement of financial position

	As previously reported December 31, 2015	Restatement adjustments	Ref	Reclassification adjustments	Ref	As restated December 31, 2015
	(in € thousands)					
Assets						
Non-current assets						
Property and equipment	81,094	—		—		81,094
Intangible assets including goodwill	78,267	(5,116)	(f)	—		73,151
Investment in associates and joint ventures	3,863	(2,433)	(h)	—		1,430
Restricted cash	19,956	—		—		19,956
Other non-current assets	458	—		—		458
Deferred tax assets	4,473	(3)		—		4,470
	<u>188,111</u>	<u>(7,552)</u>		<u>—</u>		<u>180,559</u>
Current assets						
Trade and other receivables	265,559	(6,077)	(a)	(15,184)	(k)	244,298
Income tax receivable	—	—		2,780	(i)	2,780
Short term investments	—	—		—		—
Cash and cash equivalents	597,392	—		—		597,392
Other current assets	30,881	—		(5,108)	(k)	25,773
	<u>893,832</u>	<u>(6,077)</u>		<u>(17,512)</u>		<u>870,243</u>
Total assets	<u>1,081,943</u>	<u>(13,629)</u>		<u>(17,512)</u>		<u>1,050,802</u>
(Deficit)/Equity and liabilities						
(Deficit)/Equity						
Share capital	91	—		—		91
Other paid in capital	796,853	—		—		796,853
Other reserves	84,778	673	(e)	—		85,451
Accumulated deficit	(562,772)	(91,731)	(a)-(i)	—		(654,503)
(Deficit)/Equity attributable to owners of parent	<u>318,950</u>	<u>(91,058)</u>		<u>—</u>		<u>227,892</u>
Non-current liabilities						
Convertible notes	—	—		—		—
Accrued expenses and other liabilities	7,048	9,082	(f)	—		16,130
Provisions	6,820	1,511	(c)	—		8,331
Deferred tax liabilities	—	—		—		—
	<u>13,868</u>	<u>10,593</u>		<u>—</u>		<u>24,461</u>
Current liabilities						
Trade and other payables	128,426	(6,547)	(f)	(2,738)	(k)	119,141
Income tax payable	3,301	(840)	(i)	2,877	(i)	5,338
Deferred revenue	110,496	—		(18,602)	(k)	91,894
Accrued expenses and other liabilities	416,297	67,306	(b),(d),(f)	951	(k)	484,554
Provisions	8,225	6,917	(c)	—		15,142
Derivative liabilities	82,380	—		—		82,380
	<u>749,125</u>	<u>66,836</u>		<u>(17,512)</u>		<u>798,449</u>
Total liabilities	<u>762,993</u>	<u>77,429</u>		<u>(17,512)</u>		<u>822,910</u>
Total (deficit)/equity and liabilities	<u>1,081,943</u>	<u>(13,629)</u>		<u>(17,512)</u>		<u>1,050,802</u>

Notes to the 2016 consolidated financial statements

	As previously reported December 31, 2014	Restatement adjustments	Ref	Reclassification adjustments	Ref	As restated December 31, 2014
			(in € thousands)			
Assets						
Non-current assets						
Property and equipment	50,710	—		—		50,710
Intangible assets including goodwill	58,529	—		—		58,529
Investment in associates and joint ventures	—	—		—		—
Restricted cash	9,310	—		—		9,310
Other non-current assets	740	—		—		740
Deferred tax assets	3,906	—		—		3,906
	<u>123,195</u>	<u>—</u>		<u>—</u>		<u>123,195</u>
Current assets						
Trade and other receivables	134,108	4,881	(a)	(3,506)	(k)	135,483
Income tax receivable	—	—		1,036	(i)	1,036
Short term investments	—	—		—		—
Cash and cash equivalents	206,492	—		—		206,492
Other current assets	8,720	—		(578)	(k)	8,142
	<u>349,320</u>	<u>4,881</u>		<u>(3,048)</u>		<u>351,153</u>
Total assets	<u>472,515</u>	<u>4,881</u>		<u>(3,048)</u>		<u>474,348</u>
(Deficit)/Equity and liabilities						
(Deficit)/Equity						
Share capital	85	—		—		85
Other paid in capital	404,153	—		—		404,153
Other reserves	55,401	(377)	(e)	—		55,024
Accumulated deficit	(389,675)	(33,447)	(b),(d),(f), (g),(i)	—		(423,122)
(Deficit)/Equity attributable to owners of parent	<u>69,964</u>	<u>(33,824)</u>		<u>—</u>		<u>36,140</u>
Non-current liabilities						
Convertible notes	—	—		—		—
Accrued expenses and other liabilities	6,155	5,535	(f)	—		11,690
Provisions	2,090	—		—		2,090
Deferred tax liabilities	160	—		—		160
	<u>8,405</u>	<u>5,535</u>		<u>—</u>		<u>13,940</u>
Current liabilities						
Trade and other payables	110,055	(3,170)	(f)	(933)		105,952
Income tax payable	8,487	1,986	(i)	1,036	(j)	11,509
Deferred revenue	67,569	(797)		(4,084)	(k)	62,688
Accrued expenses and other liabilities	185,874	34,567	(f)	933		221,374
Provisions	15,555	584		—		16,139
Derivative liability	6,606	—		—		6,606
	<u>394,146</u>	<u>33,170</u>		<u>(3,048)</u>		<u>424,268</u>
Total liabilities	<u>402,551</u>	<u>38,705</u>		<u>(3,048)</u>		<u>438,208</u>
Total (deficit)/equity and liabilities	<u>472,515</u>	<u>4,881</u>		<u>(3,048)</u>		<u>474,348</u>

Description of Restatement Adjustments*Revenue adjustments*

- (a) Revenue recognition – This misstatement relates to the recognition of revenue of €6.9 million in 2015 on transactions for which payment should not have been expected due to chargebacks on credit card and other payment processing issues, some of which were identified and inappropriately recognized as bad debts of €3.3 million in 2015.

Cost of revenue adjustments

Notes to the 2016 consolidated financial statements

- (b) **Royalty accruals** – This misstatement relates to an understatement of royalties owing to various rights holders of €27.6 million in 2015 and €26.5 million in 2014.
- (c) **Onerous contract** – This misstatement relates to a multiple year revenue contract with a customer that upon entering into the arrangement was an onerous contract but was not accounted for as such. The costs to provide the services in the contract exceeded the expected revenue. This item increased cost of revenue by €6.6 million in 2015.

Operating expenses

- (d) **Expense accruals** – This misstatement relates to the incorrect accrual for certain expenses, including management bonuses. The increase of €7.5 million in expenses in 2015 was reflected in a product development increase of €151,000, a sales and marketing decrease of €2.5 million and a general and administrative expense increase of €9.8 million. The misstatement related to management bonuses, including social charges, is €9.6 million and is included in general and administrative expenses.
- (e) **Stock based compensation** – This misstatement relates to grants in 2014 that had not been recorded and an understatement of social charges on stock based compensation overall. This increased the expense by €2.1 million in 2015.
- (f) **Other operating expense adjustments** – Certain errors were identified in relation to the goodwill recognized that should have been recognized as post combination employee compensation; incorrect capitalization of software, and adjustments that should have been made to lease costs to straight-line free rent periods. The total resulting adjustments from these items increased operating expenses by €4.2 million in 2015.

Finance income/costs

- (g) **Finance costs** – This misstatement relates to various errors in the determination of foreign currency gains and losses as well as interest expense on certain liabilities. These items increased finance costs by €7.6 million in 2015 and decreased finance costs by €2.1 million in 2014.
- (h) **Share in earnings of associates and joint ventures** – This misstatement relates to losses incurred by an associate that were not recognized. As a result, additional losses of €2.4 million were recognized in 2015.

Income taxes

- (i) **Income taxes** – Errors and adjustments identified resulted in a reduction to income tax expense of €3.5 million for 2015 and an increase in income tax expense of €2.0 million for 2014.

Reclassifications

- (j) The Group identified misstatements in the presentation of revenue transactions on a gross versus net basis as well as certain expenses that were inappropriately classified between functions. The impact of these changes is included in the “Reclassification adjustments” column in the tables above. These reclassifications had no impact on the Group’s results of operations, financial position, cash flows, or changes in equity.
- (k) **Deferred revenue** – This misstatement relates to an inappropriate gross-up of accounts receivable and deferred revenue for services not yet delivered. This resulted in a reduction in accounts receivable and deferred revenue of €19.0 million for 2015.

The amount of correction included at the beginning of 2014 is €7.6 million, which is included in the accumulated deficit in the consolidated statement of changes in equity. This is principally related to the royalty accruals and other operating expense adjustments.

Impact on consolidated statement of cash flows

The capitalized software misstatement impacted cash flows for investing activities by €5.1 million in the 2015 consolidated statement of cash flows. The offset of this change is included in net income in operating activities for the period.

Notes to the 2016 consolidated financial statements

5. Business Combinations

Acquisitions in 2016

During 2016, the Group acquired the operations of three separate businesses. The acquisitions were accounted for under the acquisition method. The total purchase consideration is €7.2 million, of which €6.6 million was recorded to goodwill and €571,000 to acquired intangibles assets.

Included in the arrangements are payments that are contingent on continued employment. The payments are recognized as remuneration for post-combination services and are automatically forfeited if employment terminates. A total of €2.6 million of post-combination cash pay-outs will be recorded as compensation expense over the service periods of up to three years.

The results of operations for each of the acquisitions have been included in the Group's consolidated statements of operations since the respective dates of acquisitions. Actual and pro forma revenue and results of operations for the acquisitions have not been presented because they do not have a material impact to the consolidated revenue and results of operations, either individually or in aggregate.

Acquisition in 2015

During 2015, the Group acquired the operations of one business. The acquisition is accounted for under the acquisition method. The total purchase consideration is €7.3 million, as restated, all of which was recorded in goodwill. The acquisition did not have a material impact on the Group's total revenue or net loss for the year ended December 31, 2015.

Included in the arrangements are payments that are contingent on continued employment. The payments are remuneration for post-combination services and are automatically forfeited if employment terminates. A total of €1.9 million of post-combination cash pay-outs will be recorded as compensation expense over the service period of three years.

Acquisition in 2014

On March 11, 2014, the Group acquired all of the issued and outstanding shares of The Echo Nest Corporation ("Echo Nest"), a leading music intelligence company. The total consideration was €49.7 million. The purchase consideration consisted of €5.1 million of cash, 57,929 shares of common stock in the Company and estimated pre-combination share based payment awards valued at €4.7 million (see note 16). The valuation of the common stock was consistent with the Group's use of the PWERM to value its own shares further described in note 23. The acquisition allows the Group to leverage Echo Nest's in-depth musical understanding and tools for curation to drive music discovery for users. The addition of Echo Nest also strengthens its ability to help brands and partners build amazing music experiences for their audiences. The acquisition is accounted for under the acquisition method of accounting. Accordingly, the purchase price is allocated to the assets acquired and liabilities assumed based on their fair value on the date of acquisition. The replacement of the Echo Nest's share-based payment awards with share-based payment awards of the Company has been measured in accordance with IFRS 2, *Share-based Payment*, at the acquisition date. The Group incurred €1.4 million in acquisition related costs, which were recognized as General and administration expenses. The acquisition of Echo Nest created goodwill of €40.3 million as the acquisition consideration exceeded the fair value attributable to identifiable assets and liabilities. The factors contributing to the amount of goodwill are Echo Nest's workforce and the expectation that the acquisition will create synergies, which will provide future value. None of the goodwill recognized is expected to be deductible for income tax purposes.

Included in the arrangement are payments that are contingent on continued employment. The payments are remuneration for post-combination services and are automatically forfeited if employment terminates. A total of €1.4 million of post-combination cash pay-outs were recorded as compensation expense over the service period of two years. A total of 3,968 shares issued had vesting restrictions (see note 17).

The following table summarizes the fair value of assets acquired and liabilities assumed at the acquisition date:

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	(in € thousands)
Cash and cash equivalents	3,087
Trade receivables	747
Other working capital (net)	(1,189)
Property, plant and equipment	220
Developed technology	7,495
Backlog	793
Deferred revenue	(1,730)
Deferred tax liability	(3,737)
Deferred tax asset	3,737
Total identifiable net assets	9,423
Goodwill	40,289
Total	49,712

6. Segment information

The Group has two reportable segments: premium and ad-supported. The premium business is a paid service in which customers can listen on-demand and offline with no advertisements. Revenue is generated through subscription fees. The ad-supported business is the free to the user platform. Revenue is generated through the sale of advertising. No operating segments have been aggregated to form the reportable segments.

Key financial performance measures of the segments including revenue, cost of revenue and gross profit are as follows:

	2016	2015	2014
	(in € thousands)		
Premium			
Revenue	2,638,493	1,732,306	982,741
Cost of revenue	2,154,708	1,434,245	774,213
Gross profit	483,785	298,061	208,528
Ad-supported			
Revenue	295,011	196,242	102,047
Cost of revenue	328,265	229,840	136,287
Gross profit	(33,254)	(33,598)	(34,240)
Consolidated			
Revenue	2,933,504	1,928,548	1,084,788
Cost of revenue	2,482,973	1,664,085	910,500
Gross profit	450,531	264,463	174,288

Reconciliation of gross profit

General expenditures, finance income, finance costs, taxes, and share in earnings of associates and joint ventures are not allocated to individual segments as these are managed on an overall group basis. The reconciliation between reportable segment gross profit and loss to the Group's loss before tax is as follows:

Notes to the 2016 consolidated financial statements

	2016	2015	2014
		(in € thousands)	
Segment gross profit	450,531	264,463	174,288
Product development	(206,853)	(136,107)	(114,248)
Sales and marketing	(417,911)	(258,723)	(184,009)
General and administrative	(175,179)	(105,926)	(67,165)
Finance income	152,399	35,756	28,539
Finance costs	(336,632)	(26,239)	(19,450)
Share in earnings of associates and joint ventures	(2,054)	207	(435)
Loss before tax	(535,699)	(226,569)	(182,480)

Revenue by geographic area

	2016	2015	2014
		(in € thousands)	
United States	1,166,080	737,059	327,253
United Kingdom	339,897	266,479	153,462
Sweden	201,596	181,577	170,381
Luxembourg	1,186	624	289
Other countries	1,224,745	742,809	433,403
	2,933,504	1,928,548	1,084,788

Premium revenues are attributed to an individual foreign country based on the individual region from which the membership originates. Advertising revenues are attributed to an individual country based on country of individual viewing the campaign. There are no individual countries that make up greater than 10% of total revenue included in "Other countries".

Non-current assets by geographic area

Non-current assets for this purpose consists of property and equipment.

	2016	2015
		(in € thousands)
United States	49,394	43,982
United Kingdom	18,787	20,924
Sweden	12,329	14,575
Other countries	4,329	1,613
	84,839	81,094

As of December 31, 2016 and 2015, the Group held no property and equipment within Luxembourg.

7. Personnel expenses

	2016	2015	2014
		Restated	Restated
		(in € thousands)	
Wages and salaries	230,992	163,321	115,184
Social security expenses	37,585	44,740	27,668
Contributions to retirement plans	12,142	6,672	5,820
Share-based payments	52,880	28,149	16,976
Other employee benefits	38,804	15,641	15,478
	372,403	258,523	181,126
Average full time employees	2,162	1,581	1,364

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8. Auditor Remuneration

	2016	2015	2014
	(in € thousands)		
Audit and audit related fees	3,565	3,154	2,658
Tax fees	—	—	225
All other fees	127	—	—
Total	3,692	3,154	2,883

9. Finance income and costs

	2016	2015	2014
	(in € thousands)		
		Restated	Restated
Finance income			
Fair value movements on derivative liabilities (note 23)	22,864	26,671	26,144
Interest income	4,911	1,501	1,357
Foreign exchange gains	124,624	7,584	1,038
Total	152,399	35,756	28,539
Finance costs			
Fair value movements on derivative liabilities (note 23)	(47,649)	(14,287)	(1,989)
Fair value movements on convertible notes (note 23)	(245,053)	—	—
Interest, bank fees and other costs	(5,297)	(1,121)	(2,703)
Foreign exchange losses	(38,633)	(10,831)	(14,758)
Total	(336,632)	(26,239)	(19,450)

10. Income tax

	2016	2015	2014
	(in € thousands)		
		Restated	Restated
Current tax expense/(benefit)			
Current year	5,382	5,035	(292)
Changes in estimates in respect to prior year	(1,386)	(1,426)	8,694
	3,996	3,609	8,402
Deferred tax expense/(benefit)			
Temporary differences	(849)	400	(26)
Change in recognition of deferred tax	56	477	(2,734)
Change in tax rates	308	326	—
	(485)	1,203	(2,760)
Income tax expense	3,511	4,812	5,642

There is no income tax related to components of other comprehensive income/(loss) for any of the periods presented.

The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience.

In 2016, the Group recognized €2.7 million of current income tax expense for provisions and has cumulatively recorded liabilities of €5.8 million for income tax provisions at December 31, 2016, of which €5.5 million is reasonably expected to be resolved within twelve months.

Notes to the 2016 consolidated financial statements

A reconciliation between the reported tax expense for the year and the theoretical tax expense that would arise when applying statutory tax rate in Luxembourg, 29.22 % (2015: 29.22%, 2014: 29.22%), on the consolidated loss before taxes, is shown in the table below:

	2016	2015 Restated	2014 Restated
	(in € thousands)		
Loss before tax	(535,699)	(226,569)	(182,480)
Tax using the Luxembourg tax rate	(156,531)	(66,203)	(53,321)
Effect of tax rates in foreign jurisdictions	15,210	10,243	507
Change in tax rates	308	326	—
Permanent differences	11,427	8,130	(4,492)
Change in unrecognized deferred taxes	132,313	51,704	53,374
Adjustments in respect to prior years	(1,813)	(950)	8,749
Other	2,597	1,562	825
Income tax expense	3,511	4,812	5,642

The major components of deferred tax assets and liabilities are comprised of the following:

	2016	2015 Restated	2014 Restated
	(in € thousands)		
Intangible assets	—	(1,597)	(2,197)
Share-based compensation	729	3,137	1,845
Tax losses carried forward	224	5,190	2,696
Unrealized losses / (gains)	3	(2,779)	461
Property and equipment	863	(209)	805
Other	1,309	728	136
Net Tax	3,128	4,470	3,746

	2016	2015 Restated	2014 Restated
	(in € thousands)		
Reconciliation of deferred tax, net			
At January 1	4,470	3,746	366
Movement recognized in consolidated statement of operations	485	(1,203)	2,760
Movement recognized in consolidated statement of changes in equity	(1,702)	1,292	589
Foreign exchange movements	(125)	635	31
At December 31	3,128	4,470	3,746

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

	2016	2015 Restated
	(in € thousands)	
Reconciliation to balance sheet		
Deferred tax assets	3,177	4,470
Deferred tax liabilities	(49)	—
	3,128	4,470

Notes to the 2016 consolidated financial statements

Deferred tax assets have not been recognized in respect of the following items, because it is not probable that future taxable profit will be available against which the Group can use the benefits.

	2016	2015 Restated (in € thousands)	2014 Restated
Intangible assets	41,236	—	—
Share-based compensation	2,141	19,098	9,118
Tax losses carried forward	196,968	176,013	102,746
Unrealized losses	18,333	—	1,183
Property and equipment	6,021	1,700	2,328
Foreign tax credits	3,818	1,289	—
Other	3,607	6,054	1,780
	<u>272,124</u>	<u>204,154</u>	<u>117,155</u>

In 2016, €0 (2015: €0, 2014: €2.7 million) of previously unrecognized tax losses and temporary differences were recognized.

At December 31, 2016, no deferred tax liability has been recognized on investments in subsidiaries. The Company has concluded it has the ability and intention to control the timing of any distribution from its subsidiaries and will only do so in a tax advantageous manner. It is not practicable to calculate the unrecognized deferred tax liability on investments in subsidiaries.

Tax loss carryforwards as at December 31, 2016, were expected to expire as follows:

Expected expiry	2017-2025	2026 and onwards	Unlimited	Total
	(in € thousands)			
Tax loss carryforwards	265	409,907	428,702	838,874
Foreign Tax Credits	3,818	—	—	3,818

11. Loss per share

Basic loss per share is computed using the weighted-average number of outstanding ordinary shares during the period. Diluted loss per share is computed using the weighted-average number of outstanding ordinary shares and excludes all potential ordinary shares outstanding during the period, as their inclusion would be anti-dilutive. The Group's potential ordinary shares primarily consist of incremental shares issuable upon the assumed exercise of stock options and warrants, and the incremental shares issuable upon the assumed vesting of unvested restricted stock units and restricted stock awards. The computation of loss per share is as follows:

	2016	2015	2014
	(In thousands, except per share data)		
Basic and diluted			
Net loss attributable to owners of the parent	(539,210)	(231,381)	(188,122)
<i>Shares used in computation:</i>			
Weighted-average ordinary shares outstanding	3,709	3,549	3,360
Basic and diluted loss per share	<u>(145.38)</u>	<u>(65.20)</u>	<u>(55.99)</u>

Potential dilutive securities that are not included in the diluted per share calculations because they would be anti-dilutive are as follows:

	2016	2015	2014
Employee options	274,412	229,803	174,319
Non-employee options	—	—	101,740
Restricted stock units	12,537	15,687	21,238
Restricted stock awards	—	1,984	3,968
Warrants	128,000	—	—

Notes to the 2016 consolidated financial statements

The potential ordinary shares issuable relating to the contingent options and convertible notes are issuable only upon specified contingent events. As the specified contingent events have not occurred, these contingently dilutive shares are not considered in the calculation of dilutive EPS. For further details, please see note 16 and 18.

12. Property and equipment

	<u>Property and Equipment</u>	<u>Leasehold Improvements</u> (in € thousands)	<u>Total</u>
Cost			
At January 1, 2015	54,845	21,266	76,111
Additions	41,475	11,910	53,385
Transfers	(5,245)	5,245	---
Reclassification	2,606	—	2,606
Exchange differences	2,246	2,382	4,628
At December 31, 2015	<u>95,927</u>	<u>40,803</u>	<u>136,730</u>
Additions	27,890	10,277	38,167
Disposals	(10,111)	(813)	(10,924)
Exchange differences	(2,704)	1,060	(1,644)
At December 31, 2016	<u>111,002</u>	<u>51,327</u>	<u>162,329</u>
Accumulated depreciation			
At January 1, 2015	(21,014)	(4,387)	(25,401)
Depreciation charge	(21,477)	(4,496)	(25,973)
Reclassification	(2,606)	—	(2,606)
Exchange differences	(1,419)	(237)	(1,656)
At December 31, 2015	<u>(46,516)</u>	<u>(9,120)</u>	<u>(55,636)</u>
Depreciation charge	(25,836)	(6,408)	(32,244)
Disposals	10,111	813	10,924
Exchange differences	457	(991)	(534)
At December 31, 2016	<u>(61,784)</u>	<u>(15,706)</u>	<u>(77,490)</u>
At December 31, 2015	<u>49,411</u>	<u>31,683</u>	<u>81,094</u>
At December 31, 2016	<u>49,218</u>	<u>35,621</u>	<u>84,839</u>

The Group leases various equipment under non-cancellable finance lease agreements over a lease term of 3 years. Property and equipment includes the following amounts where the Group is a lessee under a finance lease:

	2016	2015
	(in € thousands)	
Finance leases	15,487	15,891
Accumulated depreciation	(10,312)	(5,569)
	<u>5,175</u>	<u>10,322</u>

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13. Intangible assets including goodwill

	Internal development costs and patents	Acquired intangible assets	Other	Total	Goodwill	Total
	(in € thousands)					
Cost						
At January 1, 2015	—	10,912	—	10,912	51,614	62,526
Additions	4,584	—	537	5,121	—	5,121
Acquisition, business combination (note 5)	—	—	—	—	7,259	7,259
Exchange differences	—	1,129	—	1,129	5,687	6,816
At December 31, 2015, as restated	4,584	12,041	537	17,162	64,560	81,722
Additions	3,445	—	—	3,445	—	3,445
Acquisitions, business combination (note 5)	—	571	—	571	6,633	7,204
Write off of fully amortized intangibles	—	(1,380)	—	(1,380)	—	(1,380)
Exchange differences	—	278	—	278	1,737	2,015
At December 31, 2016	8,029	11,510	537	20,076	72,930	93,006
Accumulated amortization						
At January 1, 2015	—	(3,997)	—	(3,997)	—	(3,997)
Amortization charge	(424)	(3,567)	(166)	(4,157)	—	(4,157)
Exchange differences	—	(381)	(36)	(417)	—	(417)
At December 31, 2015, as restated	(424)	(7,945)	(202)	(8,571)	—	(8,571)
Amortization charge	(1,962)	(3,502)	(201)	(5,665)	—	(5,665)
Write off of fully amortized intangibles	—	1,380	—	1,380	—	1,380
Exchange differences	(64)	(334)	—	(398)	—	(398)
At December 31, 2016	(2,450)	(10,401)	(403)	(13,254)	—	(13,254)
Net book value						
At December 31, 2015, as restated	4,160	4,096	335	8,591	64,560	73,151
At December 31, 2016	5,579	1,109	134	6,822	72,930	79,752

Amortization of €4.6 million in 2016 (2015: €3.8 million, as restated, 2014: €3.4 million) is included in product development in the consolidated statement of operations. Product development costs that are not eligible for capitalization have been expensed in the period incurred.

Goodwill is tested for impairment on an annual basis or when there are indications the carrying amount may be impaired. In 2015 and 2014, the Group had only CGU. In 2016, given the Group's focus on the differentiation between Premium and Ad-supported as distinct business, as well as the evolution of these services as distinct products and experiences that appeal to different customers, the combined revenue organization was separated into two businesses. Thus, for the purpose of 2016 impairment testing, goodwill is allocated to the Group's two CGUs, the Premium business and Ad-supported business, based on the units that are expected to benefit from the business combination. The Group monitors goodwill at the CGU level for internal purposes, consistent with the way it assesses performance and allocates resources. The carrying amount of goodwill allocated to each of the CGUs is as follows:

	Premium business	Ad-supported business
	2016	2016
	(in € thousands)	
Goodwill	64,040	8,890

Valuation methodology

The recoverable amount of the Premium and Ad-supported CGUs is determined by the Probability Weighted Expected Return Method ("PWERM"). The PWERM represents fair value less costs of disposal ("FVLCD"), which is classified as Level 3 under the fair value

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hierarchy. FVLCD is calculated using the projected revenue of the Group and applying a multiple based on historical revenue multiples of comparable publicly traded companies. The PWERM method quantifies the underlying enterprise value by probability weighting the indicated equity values of potential discrete future outcomes (or "scenarios"). The weighting and key assumptions used to estimate the fair value using the PWERM were the same for both CGUs. As a result of the analysis, the FVLCD for the Premium and Ad-supported CGUs was determined to be in excess of their carrying amounts. No impairment was recorded in 2016, 2015, or 2014.

Key assumptions used in the FVLCD calculations at the impairment testing date

The valuation models weighted the different scenarios as follows:

	2016	2015
Market Approach – High Case initial public offering ("IPO")	20%	20%
Market Approach – Low Case IPO	40%	40%
Market Approach – High Case Transaction	4%	4%
Market Approach – Low Case Transaction	6%	6%
Private Case – Income and Market Approaches	30%	30%

The key assumptions used to estimate the fair value of the CGUs using the PWERM are as follows:

	2016	2015
Revenue multiple used to estimate enterprise value:	2.0 – 3.5	3.1 – 5.9
Discount rate (%)	19.0	14.0

The calculation of the FVLCD is most sensitive to the revenue multiple and discount rate assumptions. Revenue multiples were selected based on the relative growth prospects, margin, and risks of comparable companies, versus the Group as well as an assumption of market conditions at exit. The indicated value in the IPO and transaction cases were discounted back to the valuation date using a rate consistent with the Group's weighted average cost of capital ("WACC"). There are no reasonably possible changes in the key assumptions that would result in the CGU carrying amounts exceeding their recoverable amounts.

14. Restricted cash

	2016	2015
	(in € thousands)	
Lease deposits	19,684	19,219
Other	1,486	737
	<u>21,170</u>	<u>19,956</u>

15. Trade and other receivables

	2016	2015
	(in € thousands)	
		Restated
Trade receivables	248,553	176,629
Less: provision for impairment of trade receivables	(25,746)	(12,743)
Trade receivables – net	222,807	163,886
Advances to rights holders	8,443	2,034
Accrued revenue	60,692	70,241
Other receivables	7,712	8,137
	<u>299,654</u>	<u>244,298</u>

Trade receivables are non-interest bearing and generally have 30-day payment terms. Due to their comparatively short maturities, the carrying value of trade and other receivables approximate their fair value. The Group establishes an accrual against advances made to rights holders not expected to be recovered.

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The aging of the Group's trade receivables that are not impaired are as follows:

	2016 (in € thousands)	
Not yet due	127,338	85,402
Overdue 0 - 30 days	44,642	52,874
Overdue 31 - 60 days	21,204	8,555
Overdue 60 - 90 days	12,896	9,886
Overdue more than 90 days	16,727	7,169
	<u>222,807</u>	<u>163,886</u>

With respect to trade receivables that are neither impaired nor past due, there are no indications at the reporting date that the debtors will not meet their payment obligations. The trade receivables past due relate to a number of customers for whom there is no recent history of default or other indicators of impairment.

The movements in the Group provision for impairment of trade receivables are as follows:

	2016	2015 Restated
	(in € thousands)	
At January 1	12,743	6,114
Provision for receivables impairment	29,532	9,392
Receivables written off	(5,366)	(64)
Reversal of unutilized provisions	(11,163)	(2,699)
At December 31	<u>25,746</u>	<u>12,743</u>

The Group maintains a provision for impairment of a portion of trade receivables when collection becomes doubtful. The Group estimates anticipated losses from doubtful accounts based upon the expected collectability of all accounts receivables, which takes into account the number of days past due, collection history, identification of specific customer exposure, and current economic trends. An impairment loss on trade receivables is calculated as the difference between the carrying amount and the present value of the estimated future cash flow. Impairment losses are charged to General and administrative expense in the consolidated statement of operations. Receivables for which an impairment provision was recognized are written off against the provision when it is deemed uncollectible.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivables mentioned above. The Group does not hold any collateral as security.

16. Issued share capital and other reserves

The Group has incentive stock option plans under which options to subscribe to the Company's share capital have been granted to executives and certain employees. Options exercised under these plans have been settled via the issuance of new shares. As at December 31, 2016, the authorized and subscribed share capital was comprised of 10,075,044 (2015: 10,075,044) shares at a par value €0.025 each.

On November 13, 2012, the Group entered into an equity financing agreement with new and existing shareholders for the issuance of 105,103 shares for total gross proceeds of €78.7 million and incurred transaction costs of €2.7 million in addition to the shares received, the new investors also received contingent options that provided downside protection (meaning that the new investors are eligible to receive additional shares at certain valuations in the event of certain triggering events such as a trade sale, IPO, or liquidation of the Group). The contingent options were determined to be embedded derivatives which required separation from the equity issuance. The contingent options recognized as a derivative liability upon issuance were valued at €38.9 million at December 31, 2012. Refer to note 23.

On November 20, 2013, the Group entered into an equity financing agreement with new investors for the issuance of 205,829 shares. On December 19, 2013, the first closing occurred and the Group issued 139,604 shares for total gross proceeds of €123.2 million and incurred transaction costs of €2.1 million. The second closing occurred on January 17, 2014, whereby 66,225 shares were issued for

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total gross proceeds of €58.4 million. In addition to the shares received in December 2013, the new investors also received contingent options that provided downside protection (meaning that the new investors are eligible to receive additional shares at certain valuations in the event of certain triggering events such as a trade sale, IPO, or liquidation of the Group). The contingent options were determined to be embedded derivatives, which required separation from the equity issuance. The contingent options recognized as a derivative liability upon issuance were valued at €30.5 million at December 31, 2013. Refer to note 23.

On March 11, 2014, the Group acquired all of the issued and outstanding shares of The Echo Nest Corporation ("Echo Nest"). Pursuant to IFRS 3, *Business Combinations*, the total consideration was €49.7 million. The purchase consideration consisted of €5.1 million of cash, 57,928 shares of common stock in the Company, and estimated pre-combination share based payment awards valued at €4.7 million. A total of 3,968 shares issued had vesting restrictions. For further details, please see note 5 and 17.

On April 17, June 9, and July 15, 2015, the Group entered into an equity financing agreement with new and existing shareholders for the issuance of 237,122 shares for total gross proceeds of €478.9 million and incurred transaction costs of €4.4 million. In addition to the shares received, the new investors also received contingent options that provided downside protection (meaning that the new investors are eligible to receive additional shares at certain valuations in the event of certain triggering events such as a trade sale, IPO, or liquidation of the Group.). The contingent options were determined to be embedded derivatives, which required separation from the equity issuance. The contingent options are recognized as a derivative liability and were valued at €87.8 million upon issuance. For further details, please see note 23.

On October 17, 2016, the Company issued, for €26.9 million in cash, warrants to acquire 128,000 shares of its common stock to certain members of key management of the Group. The exercise price of each warrant is US\$2,024.40, which was equal to 1.2 times the fair market value of common stock on the date of issuance. The warrants are exercisable at any time through October 17, 2019. For further details, please see note 23.

No dividends were paid during the year or are proposed for the present year. All shares have equal rights to vote at general meetings.

Other reserves

	2016	2015 Restated (in € thousands)	2014 Restated
Currency translation			
At January 1	8,358	7,856	5,900
Currency translation	(13,295)	502	1,956
At December 31	(4,937)	8,358	7,856
Available for sale financial assets			
At January 1	—	—	—
Unrealized losses	(4,175)	—	—
At December 31	(4,175)	—	—
Share-based payments			
At January 1	77,093	47,168	29,454
Share-base payments (note 17)	53,360	28,633	17,125
Income tax impact associated with share-based payments (note 10)	288	1,292	589
At December 31	130,741	77,093	47,168
At December 31	121,629	85,451	55,024

Currency translation reserve comprises foreign exchange differences arising from the translation of the financial statements of foreign operations into the reporting currency.

Available for sale financial assets reserve recognizes the unrealized fair value gains and losses on current asset investments held as available for sale.

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Share-based payments reserve recognizes the grant date fair value of equity-settled awards provided to employees as part of their remuneration. For further details, please see note 17.

17. Share-based payments*Employee Share Option Plans*

Under the Employee Share Option Plans ("ESOP"), share options of the Company are granted to executives and certain employees of the Group. For options granted prior to January 1, 2016, the exercise price is equal to the fair value of the shares on grant date for employees in the United States and for US citizens and fair value less 30% for the rest of the world. The value of the discount is included in the grant date fair value of the award. For options granted thereafter, the exercise price of the options is equal to the fair value of the shares on grant date for all employees. Generally, the first vesting period (13.5% - 25% of the initial grant) is up to one year from the grant date and subsequently vests at a rate of 6.25% each quarter until fully vested. The exercise price for options is payable in the EUR value of a fixed USD amount; therefore, the Group considers these awards to be USD-denominated. The options are generally granted with a term of 5 years.

In connection with the Group's acquisition of Echo Nest in March of 2014, the Group assumed Echo Nest's equity incentive plan and issued replacement awards. The Group issued 11,454 stock options at a weighted-average exercise price of US\$282 to replace previously held Echo Nest equity awards.

Restricted Stock Awards

In connection with the Group's acquisition of Echo Nest in March of 2014, the Group issued restricted stock awards (RSAs) to certain Echo Nest employees. Vesting of the RSAs is contingent on continued employment of these employees. The awards are accounted for as equity-settled share-based payment transactions. The Group issued 3,968 RSAs. The RSAs vested annually over a two-year period from the acquisition date. During 2016, the Group recorded share-based compensation expense related to RSAs of €161,000 (2015: €1.2 million). The valuation of the RSAs was consistent with the fair value of the common stock further described in note 23.

Restricted Stock Unit Program

During 2014, the Company implemented Restricted Stock Unit (RSUs) program accounted for as equity-settled share-based payment transaction. RSUs are measured based on the fair market value of the underlying stock on the date of grant. The RSUs granted to participants under the Program generally vest over three to five years. The vesting of certain RSUs could accelerate in the event of an IPO or other change in control event. During 2016, the Group recorded share-based compensation expense related to restricted stock units of €5.2 million (2015: €7.8 million). The valuation of the RSUs was consistent with the fair value of the common stock further described in note 23.

Activity in the RSUs and RSAs outstanding and related information is as follows:

	RSU		RSA	
	Number of RSUs	Weighted Average Grant Date Fair Value US\$	Number of RSAs	Weighted Average Grant Date Fair Value US\$
Outstanding at January 1, 2015	21,238	1,215	3,968	956
Granted	2,961	1,726	-	-
Forfeited	(5,723)	1,215	-	-
Vested	(2,789)	1,215	(1,984)	956
Outstanding at December 31, 2015	15,687	1,311	1,984	956
Granted	4,402	1,674	-	-
Forfeited	(3,500)	1,215	-	-
Vested	(4,052)	1,301	(1,984)	956
Outstanding at December 31, 2016	12,537	1,469	-	-

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Activity in the share options outstanding and related information is as follows:

	ESOP		Non-employee options	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
		US\$		€
Outstanding at January 1, 2015	174,319	510	101,740	97
Granted	83,691	1,615	—	—
Forfeited	(7,922)	801	(101,740) ¹	(97)
Exercised	(17,785)	377	—	—
Expired	(2,500)	609	—	—
Outstanding at December 31, 2015	229,803	912	—	—
Granted	150,509	1,676	—	—
Forfeited	(12,814)	1,441	—	—
Exercised	(91,537)	406	—	—
Expired	(1,549)	837	—	—
Outstanding at December 31, 2016	274,412	1,475	—	—
Exercisable at December 31, 2015	123,180	527	—	—
Exercisable at December 31, 2016	94,125	1,199	—	—

1) Settled by certain of the Company's Shareholders

The weighted average contractual life for the share options outstanding at December 31, 2016 is 3.4 years (2015: 2.5 years). The weighted average share price at exercise for options exercised during 2016 was US\$1,682 (2015: US\$1,744). The weighted average fair value of options granted during the year ended December 31, 2016 was US\$524 per option (2015: US\$623).

The share options outstanding are comprised of the following:

	2016		2015	
	Number of options	Weighted average remaining contractual life (years)	Number of options	Weighted average remaining contractual life (years)
Range of exercise prices (US\$)				
Below 1,600	68,277	2.0	165,260	1.9
1,600 – 1,700	158,003	4.0	31,704	4.3
Above 1,700	48,132	3.6	32,839	4.3
	274,412	3.4	229,803	2.5

In determining the fair value of the employee share-based awards, the Group uses the Black-Scholes option-pricing model. The Company does not anticipate paying any cash dividends in the near future and therefore uses an expected dividend yield of zero in the option valuation model. The expected volatility is based on the historical volatility of public companies that are comparable to the Group over the expected term of the award. The risk-free rate is based on US Treasury zero-coupon rates as the exercise price is based on a fixed USD amount. The expected life of the share options is based on historical data and current expectations.

The following table lists the inputs to the Black-Scholes option-pricing models used for employee share-based payments for the years ended December 31, 2016 and 2015:

	2016	2015
Expected volatility (%)	37.9 – 45.8	39.4 – 55.9
Risk-free interest rate (%)	0.8 – 1.8	0.9 – 1.6
Expected life of share options (years)	2.5 – 5.0	2.8 – 5.2
Weighted average share price (US\$)	1,648 – 1,776	1,448 – 1,860

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Valuation assumptions are determined at each grant date and, as a result, are likely to change for share-based awards granted in future periods. Changes to the input assumptions could materially affect the estimated fair value of share-based payment awards.

The sensitivity analysis below shows the impact of increasing and decreasing expected volatility by 10% as well as the impact of increasing and decreasing the expected life by one year. This analysis was performed on stock options granted in 2016. The following table shows the impact of these changes on stock option expense for the options granted in 2016:

	2016 (in € thousands)
Actual stock option expense	26,187
Stock option expense increase (decrease) under the following assumption changes	
Volatility decreased by 10%	(6,887)
Volatility increase by 10%	4,465
Expected life decrease by 1 year	(5,437)
Expected life increase by 1 year	2,447

The expense recognized in the consolidated statement of operations for employee share-based payments is as follows:

	2016	2015 Restated (in € thousands)	2014 Restated
Cost of revenue	788	738	774
Product development	15,516	11,108	8,825
Sales and marketing	10,459	5,732	3,868
General and administrative	26,117	10,571	3,509
	<u>52,880</u>	<u>28,149</u>	<u>16,976</u>

18. Convertible notes and borrowings*Convertible notes*

On April 1, 2016, the Group issued US\$1,000 million principal amount of convertible notes due in 2021. The notes were issued at par and bear interest of 5.0% Payment-in-kind (PIK) interest increasing by 100 basis points every six months after two years. The notes upon a specified conversion event occurring within twelve months, will convert into common stock at a conversion rate reflecting a conversion price equal to the lesser of a price cap per share or a discount of 20.0% to the per share price of Issuer's common stock. If a specified conversion event has not occurred within twelve months, the discount will increase by 250 basis points and then again, every six months thereafter until a specified conversion event has occurred. The terms also include change of control clauses where the notes holders have the option to convert into common stock. At maturity, if the notes have not yet been converted or repaid, note holders will receive cash in an amount equal to the original principal amount plus 10% annualized return.

The Group accounts for the convertible notes in accordance with IAS 39, *Financial Instruments: Recognition and Measurement*, 'fair value option'. Under this approach, the convertible notes are accounted for in its entirety at fair value through profit or loss (initial recognition). The transaction costs of approximately US\$20 million were effectively immediately expensed in finance costs.

The convertible note agreements include certain affirmative covenants, among others, including the delivery of audited consolidated financial statements to the holders.

Notes to the 2016 consolidated financial statements*Finance lease liabilities*

Total borrowings include finance lease liabilities. Lease liabilities are effectively secured as the rights to the leased asset revert to the lessor in the event of default.

	2016	2015
	(in € thousands)	
Gross finance lease liabilities – minimum lease payments:		
Not later than one year	4,748	5,715
Later than one year but not more than 5 years	953	5,490
	<u>5,701</u>	<u>11,205</u>
Future finance charges on finance lease liabilities	(47)	(499)
Present value of finance lease liabilities	<u>5,654</u>	<u>10,706</u>

The present value of finance lease liabilities is as follows:

	2016	2015
	(in € thousands)	
No later than 1 year	4,703	5,650
Later than 1 year and no later than 5 years	951	5,056
	<u>5,654</u>	<u>10,706</u>

Undrawn borrowing facilities

On December 23, 2013, the Group signed a Revolving Credit Facility with a group of lenders. The facility provided for maximum borrowings, of US\$200.0 million. The total facility was available for issuance under a revolving loan and US\$20.0 million was available for a swingline loan. The interest rates per annum under the facility were based on floating rates of interest measured by reference to an adjusted Prime rate, Federal Funds rate, London inter-bank offered rate (LIBOR) or Euro inter-bank offered rate (EURIBOR). The Group incurred loan origination fees of approximately US\$2 million, which were deferred and amortized to finance costs over the term of the facility.

The Revolving Credit Facility was terminated on April 7, 2016. The Group had no borrowings under the senior revolving credit facility at the time of its termination. No early termination penalties were incurred by the Group as a result of the termination.

The Group incurred financing costs and commitment fees, of €966,000 in 2016 (2015: €999,000, as restated, 2014: €1.4 million, as restated), inclusive of loan origination amortization and unused commitment fees. Upon termination of the facility, the Group wrote off the remaining unamortized loan origination costs.

19. Trade and other payables

	2016	2015
	(in € thousands)	
		Restated
Trade payables	139,298	76,564
Value added tax and sales taxes payable	49,585	29,759
Employee related liabilities	5,246	3,728
Other current liabilities	7,335	9,090
	<u>201,464</u>	<u>119,141</u>

Trade payables generally have a 30-day term and are recognized and carried at their invoiced value, inclusive of any value added tax that may be applicable.

Notes to the 2016 consolidated financial statements**20. Deferred revenue**

	2016	2015 <u>Restated</u>
	(in € thousands)	
Deferred advertising revenue	1,326	1,651
Deferred subscription revenue	149,320	90,243
	<u>150,646</u>	<u>91,894</u>

21. Accrued expenses and other liabilities

	2016	2015 <u>Restated</u>
	(in € thousands)	
<i>Non-current</i>		
Deferred rent	8,915	9,082
Borrowings (note 18)	951	5,056
Other accrued liabilities	134	1,992
	<u>10,000</u>	<u>16,130</u>
<i>Current</i>		
Accrued fees to rights holders	562,271	377,465
Accrued salaries, vacation and related taxes	19,581	22,741
Accrued social charge for options and RSUs	11,011	32,771
Borrowings (note 18)	4,703	5,650
Other accrued expenses	75,200	45,927
	<u>672,766</u>	<u>484,554</u>
	<u>682,766</u>	<u>500,684</u>

Notes to the 2016 consolidated financial statements**22. Provisions**

The changes in the Group's provisions were as follows:

	Legal contingencies	Onerous contracts (in € thousands)	Other	Total
Carrying amount at January 1, 2015	584	10,705	6,940	18,229
Charged/(credited) to the consolidated statement of operations:				
Additional provisions	8,321	10,319	4,798	23,438
Reversal of unutilized amounts	5	(10,705)	(3,354)	(14,054)
Utilized	(490)	(3,650)	-	(4,140)
Carrying amount at December 31, 2015, as restated	8,420	6,669	8,384	23,473
Charged/(credited) to the consolidated statement of operations:				
Additional provisions	45,600	4,544	2,750	52,894
Reversal of unutilized amounts	-	-	-	-
Utilized	(4,564)	(6,403)	(4,390)	(15,357)
Carrying amount at December 31, 2016	49,456	4,810	6,744	61,010
As at December 31, 2015:				
Current portion, as restated	<u>4,638</u>	<u>5,160</u>	<u>5,344</u>	<u>15,142</u>
Non-current portion, as restated	<u>3,782</u>	<u>1,509</u>	<u>3,040</u>	<u>8,331</u>
As at December 31, 2016:				
Current portion	<u>49,456</u>	<u>3,782</u>	<u>4,112</u>	<u>57,350</u>
Non-current portion	<u>-</u>	<u>1,028</u>	<u>2,632</u>	<u>3,660</u>

Provision for legal contingencies

Various legal actions, proceedings, and claims are pending or may be instituted or asserted against the Group. These may include but are not limited to matters arising out of alleged infringement of intellectual property; alleged violations of consumer regulations; employment-related matters; and disputes arising out of supplier and other contractual relationships. The results of such legal proceedings are difficult to predict and the extent of the Group's financial exposure is difficult to estimate. The Group records a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

On December 28, 2015 and on January 8, 2016, two putative copyright class actions were filed against Spotify USA Inc. in the United States District Court for the Central District of California. Those lawsuits were consolidated and transferred to the Southern District of New York as Ferrick et al. v. Spotify USA Inc., Case No. 1:16-cv-08412 (AJN) (S.D.N.Y.).

Provision for onerous contracts

Onerous contracts represent promotion campaigns for premium subscriptions and a specific partner contract where the unavoidable cost of meeting the obligations exceeds the revenue generated. The costs associated with the provisions are recognized as either sales and marketing or cost of revenue. During 2015, the Group established a track record demonstrating that promotion campaigns did not result in onerous contracts and released the premium subscription provision. The Group expects the majority of this provision to be consumed within two years.

Other

The Group has obligations under lease agreements to return the leased assets to their original condition. An obligation to remove the improvement upon expiration of the lease is accounted for as asset retirement obligations. The obligations are expected to be settled at the end of the lease terms.

Indirect tax provisions relate primarily to potential non-income tax obligations in various jurisdictions. The Group recognizes provisions for claims or indirect taxes when it determines that an unfavorable outcome is probable and the amount of loss can be reasonably estimated. These provisions are recognized as General and administrative expenses.

Notes to the 2016 consolidated financial statements

23. Financial risk management and financial instruments

Financial Risk Management

The Group's operations are exposed to financing and financial risks, which are managed under the control and supervision of the Board of Directors of the Company. To manage these risks efficiently, the Group has established guidelines in the form of a treasury policy that serves as a framework for the daily financial operations of the Group. The treasury policy stipulates the rules and limitations for the management of financial risks throughout the Group.

Financial risk management is centralized within Group Treasury who are responsible for the management of financing and financial risks. Group Treasury manages and executes the financial management activities, including monitoring the exposure of financial risks, cash management, and maintaining a liquidity reserve, and it provides certain financial services to the entities of the Group. Group Treasury operates within the limits and policies authorized by the Board of Directors.

Capital management

The Group's objectives when managing capital (Cash and cash equivalents, short term investments, equity, and convertible notes) is to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital. The Group's capital structure and dividend policy is decided by the Board of Directors. Group Treasury continuously reviews the Group's capital structure considering, amongst other things, market conditions, financial flexibility, business risk, and growth rate.

The Group is not subject to any externally imposed capital requirements.

Credit risk management

Financial assets carry an element of risk that counterparties may be unable to fulfill their obligations. This exposure arises from the investments in liquid funds of banks and other counterparties. The Group mitigates this risk by adopting a risk adverse approach in relation to the investment of surplus cash. The main objectives for investments are first, to preserve principal and secondarily, to maximize return given the rules and limitations of the treasury policy. Surplus cash is invested in counterparties and instruments considered to carry low credit risk. Investments are subject to credit rating thresholds and at the time of investment, no more than 10% of surplus cash can be invested in any one issuer (excluding certain government bonds and investments in cash management banks). The weighted average maturity of the portfolio shall not be greater than 2 years, and the final maturity of any investment is not to exceed 5 years. The Group shall maintain the ability to liquidate the majority of all investments within 90 days. At December 31, 2016, the financial credit risk was equal to the consolidated statement of financial position value of cash and cash equivalents and short term investments of €1,585 million. No credit losses were incurred during 2016 on investments.

The credit risk with respect to the Group's trade receivables is diversified geographically and among a large number of customers, private individuals as well as companies in various industries, both public and private. The majority of the Group's revenue is paid in advance significantly lowering the credit risk incurred for these specific counterparties. Solvency information is required for credit sales within the Ad sales and Partner subscription business to minimize the risk of bad debt losses and is based on information provided by credit and business information from external sources.

Liquidity risk management

Liquidity risk is the risk of the Group not being able to meet the short term payment obligations due to insufficient funds. The Group has internal control processes and contingency plans for managing liquidity risk. A centralized cash pooling process enables the Group to manage liquidity surpluses and deficits according to the actual needs at the group and subsidiary level. The liquidity management takes into account the maturities of financial assets and financial liabilities and estimates of cash flows from operations. The Group strives to maintain more than €100 million equivalent available cash-in-hand and to keep an Available Cash / Revenue ratio above 20% in the longer term. Available Cash is defined as cash and cash equivalents including immediately available cash under credit facilities.

Notes to the 2016 consolidated financial statements

The Group's policy is to have a strong liquidity position in terms of available cash, short term investments, and/or unutilized committed credit facilities.

	2016	2015
	(in € thousands)	
Liquidity		
Short term investments	830,285	—
Short term deposits	372,670	232,349
Cash at bank and on hand	382,234	365,043
Total surplus liquidity	1,585,189	597,392
Committed credit facilities		
Revolving credit facilities (limit amount)	—	184,162
Total unutilized committed credit facilities	—	184,162
Liquidity position	1,585,189	781,554

Currency risk management

Transaction exposure relates to business transactions denominated in foreign currency required by operations (purchasing and selling) and/or financing (interest and amortization). The Group's general policy is to hedge transaction exposure on a case by case basis. During 2016, the Group has not entered into any hedging transactions. The Group is evaluating this policy on a continuous basis. The Group strives, as far as possible, to mitigate its currency exposure in the USD denominated convertible notes by matching the balance with USD denominated cash equivalents and short term investments creating a natural hedge. Translation exposure relates to net investments in foreign operations. The Group does not conduct translation risk hedging.

(i) Transaction exposure sensitivity

In most cases, the Group's customers are billed in their respective local currency. Major payments, such as salaries, consultancy fees, and rental fees are settled in local currencies. Royalty payments are primarily in EUR and USD. Hence, the operational need to net purchase foreign currency is primarily due to a deficit from such settlements.

The table below shows the immediate impact on net income before tax of a 10% strengthening in the closing exchange rate of significant currencies to which the Group has exposure, at December 31, 2016 and 2015. The sensitivity associated with a 10% weakening of a particular currency would be equal and opposite. This assumes that each currency moves in isolation.

2016	SEK	AUD	EUR	GBP	USD
	(in € thousands)				
Increase/(decrease) in income before tax	(19,785)	6,301	(36,226)	(21,939)	(31,050)
2015	SEK	AUD	EUR	GBP	USD
	(in € thousands)				
Increase/(decrease) in income before tax	(18,491)	5,347	(24,278)	(23,092)	16,782

(ii) Translation exposure sensitivity

The positive impact on Group's equity would be approximately €40 million (2015: €28 million) if the EUR weakened by 10 percentage points against all translation exposure currencies, based on the exposure at December 31, 2016.

Interest rate risk management

Interest rate risk is the risk that changes in interest rates will have a negative impact on Group earnings and cash flow. The fair value of the Group's convertible notes is dependent on market interest rates, which may negatively impact earnings. The convertible notes are remeasured at each reporting date using valuation models using input data which includes market interest rates. Changes in the fair value of the convertible notes are recognized in finance income or cost in the consolidated statement of operations. An increase in market interest rates will decrease the value of the convertible notes. The Group has not entered into any hedging arrangement to mitigate these fluctuations.

Notes to the 2016 consolidated financial statements

The Group's exposure to interest rate risk is also related to its interest-bearing assets, primarily its available for sale debt securities. Fluctuations in interest rates impact the yield of the investment. The sensitivity analysis considered the historical volatility of short term interest rates and determined that it was reasonably possible that a change of 100 basis points could be experienced in the near term. A hypothetical 1.00% (100 basis points) increase in interest rates would have impacted interest income by €6.2 million for the year ended December 31, 2016.

Financing risk management

The Group finances its operations through external borrowings, equity, and cash flow from operations. The funding strategy has been to diversify funding sources. Currently the external debt consists of the convertible notes and finance leases.

Share Price Risk Management

Share price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in the fair value of the Company's common share price. The Group's exposure to this risk relates primarily to the derivative liabilities arising from financing activities. These derivative liabilities are remeasured at each reporting date using valuation models using input data based on the Company's share price. Changes in the fair value of these instruments are recognized in finance income. An increase of share price will decrease the value of the financing arrangements. The Group has not entered into any hedging arrangement to mitigate these fluctuations.

Management of insurable risks

Insurance coverage is governed by corporate guidelines and includes a common package of different property and liability insurance programs. The business is responsible for assessing the risks to decide the extent of actual coverage. Group Treasury manages the common Group insurance programs.

Notes to the 2016 consolidated financial statements**Financial Instruments****Fair values**

Set out below is a comparison of the carrying amounts and fair values of financial assets and liabilities. The carrying amounts of certain financial instruments, including cash and cash equivalents, trade and other receivables, restricted cash, trade and other accounts payable, and accrued expenses approximate fair value due to their relatively short maturities.

	2016		2015	
	Carrying value	Fair value	Carrying value	Fair value
	(in € thousands)			
Financial assets				
Cash and cash equivalents	754,904	754,904	597,392	597,392
Trade and other receivables (note 15)	299,654	299,654	244,298	244,298
Short term investments:				
Government securities	262,193	262,193	—	—
Agency securities	55,083	55,083	—	—
Corporate notes	322,651	322,651	—	—
Collateralized reverse purchase agreements	190,358	190,358	—	—
Restricted cash (note 14)	21,170	21,170	19,956	19,956
Total	1,906,013	1,906,013	861,646	861,646
Financial liabilities				
Fair value through profit or loss:				
Convertible notes (note 18)	1,106,354	1,106,354	—	—
Derivatives (not designated for hedging):				
Contingent options (note 16)	99,646	99,646	82,008	82,008
Warrants (note 16)	34,019	34,019	—	—
Other	—	—	372	372
Trade and other payables (note 19)	201,464	201,464	119,141	119,141
Accrued expenses and other liabilities (note 21)	673,717	673,717	489,610	489,610
Total	2,115,200	2,115,200	691,131	691,131

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined in note 2.

Notes to the 2016 consolidated financial statements

As at December 31, 2016, the Group held the following classes of financial instruments measured at fair value:

Financial assets and liabilities by fair value hierarchy level	2016	Level 1	Level 2	Level 3
	(in € thousands)			
Financial assets at fair value				
Available for sale financial assets				
Short term investments:				
Government securities	262,193	247,597	14,596	—
Agency securities	55,083	—	55,083	—
Corporate notes	322,651	—	322,651	—
Collateralized reverse purchase agreements	190,358	—	190,358	—
Total financial assets at fair value by level	830,285	247,597	582,688	—
Financial liabilities at fair value				
Fair value through profit or loss:				
Convertible notes	1,106,354	—	—	1,106,354
Derivatives (not designated for hedging):				
Contingent options	99,646	—	—	99,646
Warrants	34,019	—	—	34,019
Total financial liabilities at fair value by level	1,240,019	—	—	1,240,019

As at December 31, 2015, the Group held the following classes of financial instruments measured at fair value:

Financial assets and liabilities by fair value hierarchy level	2015	Level 1	Level 2	Level 3
	(in € thousands)			
Financial liabilities at fair value				
Derivatives (not designated for hedging):				
Contingent options	82,008	—	—	82,008
Other	372	—	—	372
Total financial liabilities at fair value by level	82,380	—	—	82,380

The Group's policy is to recognize transfers into and transfers out of fair value hierarchy levels at the end of the reporting period.

During the years ended December 31, 2016 and 2015 there were no transfers between levels in the fair value hierarchy.

Recurring Fair Value Measurements

The following sections describe the valuation methodologies the Group uses to measure the level 3 financial instruments at fair value on a recurring basis.

Fair value of common stock

The valuation of certain items in the consolidated financial statements is consistent with the Group's use of the Probability Weighted Expected Return Method (PWERM) to value its own shares.

The fair value of the common stock is determined using the PWERM, which is one of the recommended valuation methods to measure fair value in privately held companies with complex equity structures in the American Institute of Certified Public Accountants Practice Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. Under this method, discrete future outcomes, including IPO, non-IPO scenarios and a merger or sale are weighted based on estimates of the probability of each scenario. In the Group's application of this method, five different future scenarios are identified (high and low case IPO, high and low case transaction, and private company). For each scenario, an equity value is calculated based on revenue multiples, derived from listed peer companies, which are applied on different (scenario-dependent) forecasted revenues for the Group. For the private company scenario, a discounted cash flow method is also considered in determining the equity value. Common share values are weighted by the probability of each scenario in the valuation model. In addition, an appropriate discount adjustment is incorporated to recognize the lack of marketability due to being a closely held entity. Finally, the impact on the share value of recent financing and secondary trading are considered.

Notes to the 2016 consolidated financial statements

The valuations weighted the different scenarios as follows:

	2016	2015
Market Approach – High Case IPO	20 – 25%	20%
Market Approach – Low Case IPO	35 – 40%	40%
Market Approach – High Case Transaction	4%	4%
Market Approach – Low Case Transaction	6%	6%
Private Case – Income and Market Approaches	30%	30%

The key assumptions used to estimate the fair value of the common stock and contingent options using the PWERM are as follows:

	2016	2015
Revenue multiple used to estimate enterprise value	2.0 – 3.5	2.5 – 4.5
Discount rate (%)	14.0 – 19.5	13.0 – 14.0
Volatility (%)	35.0 – 47.5	40.0 – 45.0

Contingent options

The Group's derivatives include contingent options that provide investors associated with the equity financings with downside protection.

The contingent options are measured on a recurring basis in the consolidated statement of financial position and are Level 3 financial instruments recognized at fair value through the consolidated statement of operations. The contingent options are valued using the models that include the value of the Company's common stock, including the assumptions for probability scenarios and PWERM as determined above. The key assumptions used to estimate the fair value of the options using the PWERM are consistent with those noted above.

Under each scenario, the Group computed the difference between a) the value of the new shares, valued with the embedded contingent options and b) the common shares, valued without the embedded contingent options ("Common Shares") to derive an indication of the value of the contingent options for each scenario. The differential between new shares and the Common Shares were discounted, where appropriate, to present value to arrive at an indication of the value of the contingent options for each scenario at the valuation date. Finally, the indicated values under each scenario were weighted based on the weightings noted above to determine the indicated value of the contingent options.

The impact on the fair value of the contingent options of using reasonably possible alternative assumptions with an increase or a decrease of share price of 10% results in a range of €79.9 million to €121.9 million (2015: €71.6 million to €102.4 million) at December 31, 2016.

The table below presents the changes in the contingent options liability as at December 31:

	2016	2015
	(in € thousands)	
At January 1	82,008	6,606
Equity financing transactions - contingent options	—	87,787
Loss/(gain) recognized in profit or loss	17,638	(12,385)
At December 31	99,646	82,008

The contingent options liability is included in derivative liabilities on the consolidated statement of financial position. The change in estimated fair value is recognized within finance income or costs in the consolidated statement of operations.

Warrants

On October 17, 2016, the Company sold, for €26.9 million, warrants to acquire 128,000 shares of its common stock (Warrants) to certain holders that are employees and management of the Group. The exercise price of each warrant is US\$2,024.40, which was equal to 1.2 times the fair market value of common stock on the date of issuance. The Warrants are exercisable at any time through October 17, 2019. The warrants are measured on a recurring basis in the consolidated statement of financial position and are Level 3 financial instruments recognized at fair value through the consolidated statement of operations. The warrants are valued using a Black-Scholes

Notes to the 2016 consolidated financial statements

option pricing model, which includes inputs determined from models that include the value of the Company's common stock, as determined above and additional assumptions used to estimate the fair value of the warrants in the option pricing model as follows:

	2016
Expected term (years)	1.85 - 2.09
Risk free rate (%)	0.77 - 1.14
Volatility (%)	35.0 - 37.5
Share price (US\$)	1,687 - 1776

The table below presents the changes in the warrants liability as at December 31:

	2016 (in € thousands)
At January 1	—
Issuance of warrants for cash	26,872
Loss recognized in profit or loss	7,147
At December 31	34,019

The warrant liability is included in derivative liabilities on the consolidated statement of financial position. The change in estimated fair value is recognized within finance costs in the consolidated statement of operations.

The sensitivity analysis below calculates the impact of increasing and decreasing expected volatility by 10% as well as the impact of increasing or decreasing the expected term by half a year. The following table shows the impact of these changes on finance costs.

	2016 (in € thousands)
Actual change in fair value recognized within finance costs	7,147
Warrants fair value adjustments increase (decrease) under the following assumption changes	
Volatility decreased by 10%	(4,200)
Volatility increase by 10%	4,364
Expected term decrease by 0.5 year	(6,672)
Expected term increase by 0.5 year	5,846

The impact on the fair value of the contingent options of using reasonably possible alternative assumptions with an increase or a decrease of share price of 10% results in a range of €21.2 million to €43.4 million at December 31, 2016.

Convertible notes

The convertible notes are measured on a recurring basis in the consolidated statement of financial position and are Level 3 financial instruments recognized at fair value through the consolidated statement of operations. The fair value of the debt was determined based on consideration and weighting of two future scenarios, a Near Term Exit (where the debt is convertible into shares of common stock in the case of a qualifying event) and a Private Company Case. All components of the debt under the Near Term Exit and Private Company Case, with the exception of the share cap, which assumes a risk free discount rate, were discounted at the implied rate on the date of issuance plus the chosen benchmark rate. The calculation under the Private Company Case, assumes the debt is repaid at maturity.

A binomial option pricing model was used to assess the value of the Price Cap Derivative. The key assumptions, including the weighting of the different scenarios and those used in the valuing the Price Cap Derivative, were as follows:

	2016
Case - Near Term Exit	70%
Case - Private Company Case	30%
	2016
Risk free rate (%)	0.6 - 0.7
Discount rate (%)	14.4 - 17.0
Volatility (%)	35.0 - 42.5

Notes to the 2016 consolidated financial statements

The table below presents the changes in the convertible notes as at December 31:

	2016 (in € thousands)
At January 1	—
Loan financing transaction - convertible notes	861,301
Loss recognized in profit or loss	245,053
At December 31	1,106,354

The change in estimated fair value is recognized within finance costs in the consolidated statement of operations.

The sensitivity analysis below calculates the impact of increasing or decreasing the expected underlying interest rate by 100 basis points. The following table shows the impact of this change on finance costs.

	2016 (in € thousands)
Actual change in fair value recognized within finance costs	245,053
Convertible notes fair value adjustments increase (decrease) under the following assumption changes	
Discount rate decreased by 100 basis points	15,636
Discount rate increased by 100 basis points	(15,105)

The impact on the fair value of the convertible notes of using reasonably possible alternative assumptions with an increase or decrease in share price of 10% results in a range of €1,114.7 million to €1,101.3 million at December 31, 2016.

24. Commitments and contingencies**Obligations under leases**

The Group leases certain properties under non-cancellable operating lease agreements. The lease terms are between one and ten years, and the majority of the lease agreements are renewable at the end of the lease period.

The future minimum lease payments under non-cancellable operating leases are as follows:

	2016	2015
	(in € thousands)	
Not later than one year	25,386	16,108
Later than one year but not more than 5 years	97,161	81,596
More than 5 years	90,271	111,453
	<u>212,818</u>	<u>209,157</u>

Total lease expenses were €18.9 million, €14.2 million, as restated, and €10.6 million, as restated, for the years ended December 31, 2016, 2015 and 2014, respectively.

The Group also has finance leases for various items of equipment. The obligations under finance leases are secured by the lessor's title to the leased assets. Future minimum lease payments under finance leases and hire purchase contracts together with the present value of the net minimum lease payments are disclosed in note 18.

Notes to the 2016 consolidated financial statements**Commitments**

The Group is subject to minimum royalty payments associated with its license agreements.

	2016	2015
	(in € thousands)	
Not later than one year	25,554	32,335
Later than one year but not more than 5 years	14,245	4,282
	<u>39,799</u>	<u>36,617</u>

Contingencies

The Group is and may become subject to legal proceedings, claims, and litigation arising in the ordinary course of business. In order to stream sound recordings over the Internet we license certain rights from various organizations. These organizations have the right to audit our playlists and royalty payments, and any such audit could result in disputes over whether we have paid the proper royalties. If such a dispute were to occur, we could be required to pay additional royalties, and the amounts involved could be material. The results of complex legal proceedings are difficult to predict, and the Group's view of these matters may change in the future as the litigation and events related thereto unfold. The Group expenses legal fees as incurred. The Group records a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. An unfavorable outcome to any legal matter, if material, could have an adverse effect on the Group's operations or its financial position, liquidity, or results of operations.

25. Related party transactions***Key management compensation***

Key management includes members of the Company's executive committee and the board of directors. The compensation paid or payable to key management for Board and employee services includes their participation in share-based compensation arrangements. The disclosure amounts are based on the expense recognized in the consolidated statement of operations in the respective year.

	2016	2015	2014
		Restated	Restated
	(in € thousands)		
Key management compensation			
Short term employee benefits	3,890	15,422	3,086
Share-based payments	17,788	9,971	784
Post-employment benefits	652	112	68
Termination benefits	587	—	—
	<u>22,917</u>	<u>25,505</u>	<u>3,938</u>

As noted in note 16, the Company issued warrants to acquire shares of its common stock to certain members of key management of the Group.

The Group recognized partner revenues from its associate in Soundtrack Your Brand Sweden AB of €1.9 million during year ended December 31, 2016 (2015: 0.6 million, 2014: 0.1 million).

Notes to the 2016 consolidated financial statements**26. Group information**

The Company's principal subsidiaries as at December 31, 2016 are as follows:

Name	Principal activities	Proportion of voting rights and shares held (directly or indirectly)	Country of incorporation
Spotify AB	Main operating company	100%	Sweden
Spotify USA Inc.	USA operating company	100%	USA
Spotify Ltd	Sales, marketing and customer support	100%	UK
Spotify Norway AS	Sales and marketing	100%	Norway
Spotify Spain S.L.	Sales and marketing	100%	Spain
Spotify GmbH	Sales and marketing	100%	Germany
Spotify France SAS	Sales and marketing	100%	France
Spotify Sweden AB	Sales and marketing	100%	Sweden
Spotify Netherlands B.V.	Sales and marketing	100%	Netherlands
Spotify Canada Inc.	Sales and marketing	100%	Canada
Spotify Australia Pty Ltd	Sales and marketing	100%	Australia

There are no restrictions on the net assets of the Group companies.

Information about associates and joint ventures

The Group holds an equity interest in Soundtrack Your Brand Sweden AB, this interest was diluted in December 2016 from 30.7% to 26.5% resulting from a financing round in which the Group did not participate. The total assets and net assets of Soundtrack Your Brand Sweden AB are not material to the Group.

The Group co-founded a joint arrangement, Symposium Stockholm AB (Symposium), in 2015. In December 2016, the Group divested its interest in Symposium to its joint arrangement partner. This did not have a material impact on the Group consolidated financial statements.

27. Events after the reporting period

In February 2017, the Group entered into a 17 year operating lease agreement to occupy approximately 380,000 square feet at 4 World Trade Center in New York, New York, United States of America. The total estimated base rent payments over the life of the lease are approximately €480 million. The Group also will incur costs to build out the floors to its specifications. We have committed approximately €26 million for a letter of credit as security on the lease.

Subsequent to year end, the Group completed acquisitions of four privately held companies for cash and stock totaling approximately €39 million.

Subsequent to year end, the Group signed multi-year license agreements with certain music labels and publishers. Included in these agreements are minimum guarantee commitments of approximately €2 billion for royalty payments over the next two years.

**Exclusive Report: Spotify Artist Payments Are Declining In 2017, Data Shows**▲ [Daniel Sanchez](https://www.digitalmusicnews.com/author/danilsanchez/) (<https://www.digitalmusicnews.com/author/danilsanchez/>) • May 16, 2017 • 10 min (<https://www.digitalmusicnews.com/2017/05/16/spotify-artist-payments-low-rates/#summary>)[https://www.digitalmusicnews.com/wp-](https://www.digitalmusicnews.com/wp-content/uploads/2017/05/Daniel-Ek-Official-Loweb-Photos.jpg)[content/uploads/2017/05/Daniel-Ek-Official-Loweb-Photos.jpg](https://www.digitalmusicnews.com/wp-content/uploads/2017/05/Daniel-Ek-Official-Loweb-Photos.jpg)**As Spotify's revenue goes up, artist per-stream and revenue payouts are going way, way down. And here's the data to prove it.**

Two years ago, in a funding round, investors valued Spotify at \$8 billion. In the latest round, investors pushed that number above \$13 billion. Sounds like some serious growth. Yet investors can't ignore one glaring fact: after ten years, the company has yet to turn a profit.

But maybe that's just another detail. Now, analysts expect the company to finally go public on Wall Street within a year. And the deals to make that a reality are finally starting to happen.

Recently, Spotify struck new long-term licensing deals with both Universal Music Group and independent music rep Merlin. They're also rumored to be closing a similar deal with Warner Music Group. Ahead of their long-awaited listing on Wall Street, Spotify seems to have it made.

Yet, why are artists receiving less money as Spotify grows, not more?

Top-line revenues at Spotify are surging ahead, thanks to a flood of new subscribers. A boost in monthly premium payments and increased advertising means a lot more revenue. That part is simple. Yet strangely, Spotify's per-stream royalties across both recordings and publishing appear to be sinking, according to data shared with DMN. That includes per-stream payments to labels (including indie labels and self-administered artists), plus mechanical royalty payments to publishers.

In other words, 1,000 streams on Spotify two years ago — when the platform was making less gross revenue — made rights holders more money than 1,000 streams today.

Musicians and labels on the service have felt the crunch. But why is this happening? Let's rewind a bit.

Two years ago, a report [published](http://blog.audiam.com/2015/06/the-2014-interactive-streaming-data-as-20.html) (<http://blog.audiam.com/2015/06/the-2014-interactive-streaming-data-as-20.html>) by Audiam found that as Spotify's revenues went up, artists and label royalties went down. Audiam is a reproduction rights organization headed by Jeff Price, and recently purchased by Canadian rights group SOCAN. The company is basing a lot of its data on payouts reported under Section 115 of US Copyright Law.

Audiam stated then,

"However, the impact on the artists, songwriters, labels and music publishers is a bizarre, unexpected anti-intuitive equation that seems to subscribe to Newton's third law of physics: 'For every action, there is an equal and opposite reaction.'

"In this case, as more money is made from the music, music creators and copyright holders are making less."

So, two years later, with Spotify finally reporting growing revenue, have these numbers changed? Not even close. To put it bluntly, Spotify has found a way to keep more of the revenue they earn (per stream) in their pockets.

Spotify seems to be countering this accusation by pointing to increased overall royalty payments. But a closer look at the math shows that Spotify may be paying more — but is also taking a lot more. All of which means that Spotify (and its shareholders, which include major labels) are cutting costs on per-stream payouts.

Audiam has now issued a new report, and shared it exclusively with Digital Music News. Again, Audiam is sourcing a lot of its data from publicly available stats. "The numbers I am providing are not Audiam's numbers," remarked Audiam founder Jeff Price. "They are numbers reported by Spotify as required under Sec 115 of US copyright law."

Essentially, the latest report updates the streaming service's per stream numbers ending February, 2017. And they reached the same conclusion: as Spotify's value and revenues go up, artists and publishers are making less.

Let's start with Spotify's ad-supported tier. In February 2017, a single ad-supported stream generated \$0.00014123 on the streaming service. This means an artist would earn \$100 in mechanical royalties after 703,581 streams. Although this number represents a 1.1% increase from January, in December 2016, the number was at \$0.00022288.

For the premium tier during the same month, Spotify paid out \$0.00066481 per stream in mechanicals. In this scenario, artists would earn \$100 after 150,419 streams. This number is up 5.2% from January. Sounds great, until you see the year-over-year trend.



Another key thing to notice is the following discrepancies. In December 2016, to earn \$100 from ad-supported streams, a song would need be played 448,672 times. Spotify paid out \$0.00022288. Yet, just one month later, the number dropped down to 740,302. To earn \$100 from ad-supporter streams, a song would have to be played 740,302 times. Note that this didn't apply to premium streams.



Between December 2016 and January 2017, Spotify cut their ad-supported payouts by nearly half. The number continues dropping as the year progresses, with premium streams slightly increasing.

Spotify US Mechanical Rate

December 2016 

Ad Supported (Tier: S5)


\$0.00022288 Per Stream
\$100 = 448,672 streams

Premium (Tier: S3)

\$0.00063933 Per Stream
\$100 = 156,414 streams

[Calculate Your Own Earnings !\[\]\(003082e50e3009141f59bd5df831749f_img.jpg\)](#)

Spotify US Mechanical Rate

January 2017 

Ad Supported (Tier: S5)

\$0.00013508 Per Stream
\$100 = 740,302 streams

Premium (Tier: S3)

\$0.00065749 Per Stream
\$100 = 152,094 streams

[Calculate Your Own Earnings !\[\]\(b4eeff342f60cc7bcd67d869b4fedca2_img.jpg\)](#)

<http://www.digitalmusicnews.com/wp->

Spotify US Mechanical Rate

February 2017 ↕

Ad Supported (tier S5)

\$0.00014213 Per Stream
\$100 = 703,581 streams

Premium (tier S3)

\$0.00066481 Per Stream
\$100 = 150,419 streams

Calculate Your Own Earnings ▼

What goes up must come down. Just not in Spotify's world.

In a strongly-worded piece in [his blog \(http://lefsetz.com/wordpress/2017/01/11/spotify-payments/\)](http://lefsetz.com/wordpress/2017/01/11/spotify-payments/), Bob Lefsetz defended the low payouts. According to him, Spotify pays out over 69% of its revenues. So, why the criminally low payouts? Blame the music labels. Calling out Audiam's founder and CEO Jeff Price, Lefsetz explains,

"You're being screwed by the label. And Spotify can't say this, because the labels are their partners."

But Lefsetz seems to be ignoring the reality that most of the recordings on Spotify come from self-distributed artists. These artists aren't signed to a label, they *are* the label. But also seemingly disregarding Audiam's [previously published numbers \(http://blog.audiam.com/2015/06/the-2014-interactive-streaming-data-as-20.html\)](http://blog.audiam.com/2015/06/the-2014-interactive-streaming-data-as-20.html), Lefsetz attacked,

"What about Jeff Price, its old fired founder, bullish—ting that Spotify is not paying on so many tracks? That's a registry problem, that's not Spotify seeking to rip-off rights holders, that's the result of an archaic system wherein we don't know who wrote what and who owns what. Does it need to be cleared up? Yes."

However, Lefsetz, seemingly Spotify's apologist, can't defend the following stats, no matter how hard he tries. Take a look at the numbers:

- 2016 Total Gross Revenue: Slightly over \$1.1 billion
- Average streaming rate: \$0.0046524
- Total plays: Over 162 billion
- Royalty pool amount: \$75.4 million
- PRO fees: Almost \$72 million

What can we deduce from the amounts? The same conclusion that Audiam came to in 2014. As Spotify's top line Gross Revenue increases, the per stream mechanical rate continues to drop.

As Spotify continues to prepare for their long-awaited IPO, there's no clear explanation as to why they continue to pay out artists such little money. Audiam posted a [publicly available website \(http://resources.audiam.com/rates\)](http://resources.audiam.com/rates) to show historically falling per stream mechanical royalty rates. And despite Lefsetz' best attempts to protect Spotify (calling Jeff Price out of touch), his final defense of the company ultimately sounds very hollow.

"But you've got an historical deal with a label that pays an incredibly low percentage, you've got a very low royalty rate, is this a problem? Absolutely. BUT IT IS NOT SPOTIFY'S FAULT!"

Or, is it?

Image by Official Leweb Photos (CC by 2.0)

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CELEBS REACT TO MEEK MILL'S PRISON SENTENCE
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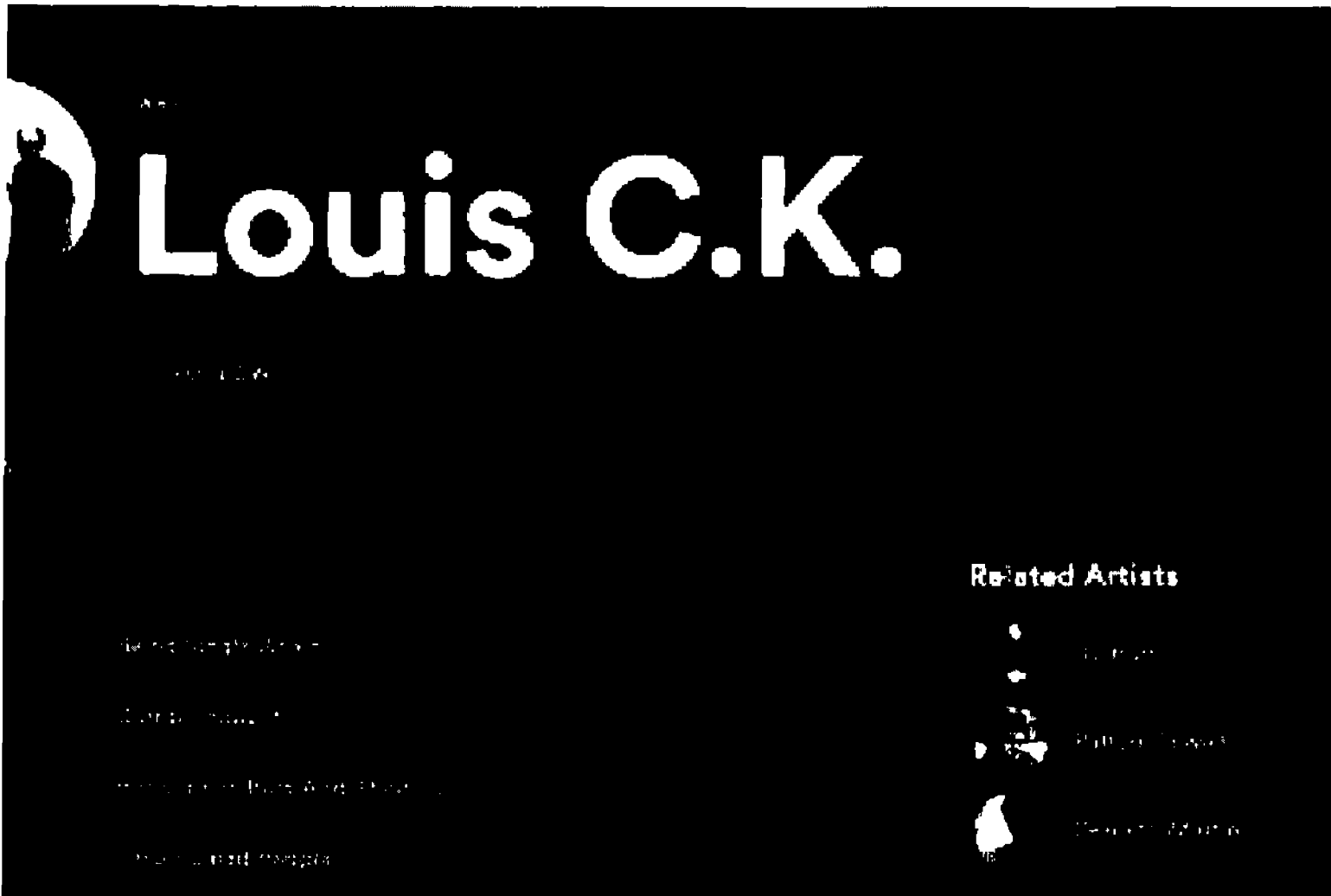
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LIANGELO BALL RELEASED FROM JAIL IN CHINA
TMZ.COM
(HTTP://WWW.ZEROGNET.COM/1/2219681/58294/0/0/0/2)



<http://www.zerog.net/2224550/58294/0/0/0/3>
TAYLOR SWIFT WRITES EMOTIONAL LETTER TO HER FANS
AOL.COM
(HTTP://WWW.ZEROGNET.COM/1/2224550/58294/0/0/0/3)



<http://www.zerog.net/2038384/58294/0/0/0/4>
JAY-Z'S MOM REVEALS HOW HE REACTED WHEN SHE CAME OUT
USMAGAZINE.COM
(HTTP://WWW.ZEROGNET.COM/1/2038384/58294/0/0/0/4)



The image shows a screenshot of a Spotify profile for the artist Louis C.K. The profile is set against a dark background with a silhouette of a person in a white circle on the left. The name "Louis C.K." is prominently displayed in large white letters. Below the name, the text "FOLLOW" is visible. On the right side, there is a section titled "Related Artists" which lists four other artists: "The Roots", "Phish", "The Roots", and "The Roots". At the bottom of the profile, there are four album covers with their respective titles: "The Roots", "The Roots", "The Roots", and "The Roots".

<https://www.digitalmusicnews.com/2017/11/10/spotify-louis-ck/>

https://www.fox.com/.../2017/11/11/fox-news-.../





October 10, 2011
(<https://www.digitalmusicnews.com/2011/11/10/pandora-radio-death-watch/>)

<https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/#comment-288757>

30 RESPONSES

Trex

May 16, 2017 (<https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/#comment-288757>)

Stop giving your work away

REPLY ([HTTPS://WWW.DIGITALMUSICNEWS.COM/2017/05/16/SPOTIFY-AUDIAM-LOW-RATES/?REPLYTOCOM=288757#RESPOND](https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/?replytocom=288757#respond))

Imao

May 16, 2017 (<https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/#comment-288759>)

who the hell cares about mechanical royalties, trash article.... and fuck your mechanical royalties nobody cares about... LAME

REPLY ([HTTPS://WWW.DIGITALMUSICNEWS.COM/2017/05/16/SPOTIFY-AUDIAM-LOW-RATES/?REPLYTOCOM=288759#RESPOND](https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/?replytocom=288759#respond))

Will Buckley

May 18, 2017 (<https://www.digitalmusicnews.com/2017/05/16/spotify-audiam-low-rates/#comment-288888>)

What's your point? Artists shouldn't get paid or the compensation is so LAME, who cares.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on November 13, 2017, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's SDNY Procedures for Electronic Filing.

/s/ Steven G. Sklaver
Steven G. Sklaver