

MOODY'S

INVESTORS SERVICE

CREDIT OPINION

17 September 2018

Update

 Rate this Research

RATINGS

Intralot S.A.

Domicile	Athens, Greece
Long Term Rating	B2
Type	LT Corporate Family Ratings
Outlook	Negative

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Kristin Yeatman +44.207.772.5213
VP-Senior Analyst
kristin.yeatman@moody.com

Marco Sforza +44.20.7772.1074
Associate Analyst
marco.sforza@moody.com

Peter Firth +44.20.7772.5222
Associate Managing Director
peter.firth@moody.com

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

Intralot S.A.

Update of key credit factors following downgrade to B2

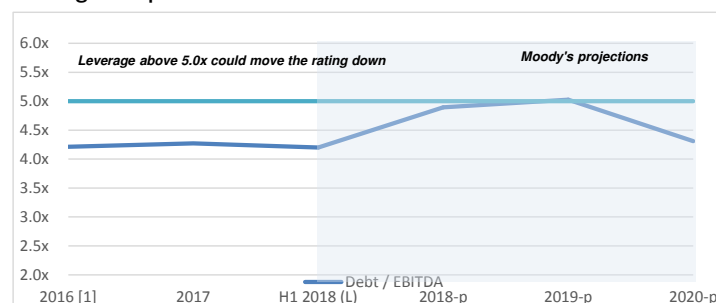
Summary

Intralot S.A. ("Intralot" or the "company")'s B2 reflects (i) the continued high Moody's adjusted leverage of 4.2x at LTM June 2018, and our expectation that leverage will increase towards 5x by the end of 2018 mainly due to unfavorable currency movements, particularly the Turkish lira. We do not expect deleveraging to begin before 2020 unless significant disposal proceeds are used to repay debt; (ii) the persistent negative free cash flow generation since 2015 expected to continue until 2020 as a result of capital expenditure and dividend payments to minorities; (iii) the company's significant presence in emerging markets including Argentina, Azerbaijan and Turkey, the latter contributing 23% of 2017 EBITDA (20.6% in H1 2018); (iv) limited historic growth track record; (v) exposure to regulatory and fiscal risks inherent to the gaming industry; (vi) the risk of further unfavorable foreign exchange movements, and; (vii) the existence of significant minority interests which results in pro-rata leverage being materially higher than reported (fully consolidated) leverage, as well as substantial cash leakage through dividend outflows to the minorities.

More positively, Intralot's B2 CFR takes into account (i) a leading market position as a global supplier of integrated gaming systems and services; (ii) a diversified contract portfolio with 87 contracts and licences; (iii) its broad geographical presence in 50 jurisdictions with a foothold in the US which has significant growth potential following the invalidation of the US federal sports betting ban, although with dependency on certain countries in emerging markets such as Turkey and Argentina; (iv) good revenue visibility as a result of a large number of long-term contracts, and; (v) a proven track record of renewing existing contracts and winning new business, with growth potential from further liberalization of the gaming sectors in less mature markets.

Exhibit 1

Leverage is expected to increase into 2019



Moody's adjusted Debt/EBITDA; This represents Moody's forward view, not the view of the issuer.
Source: Moody's Investors Service

Credit Strengths

- » Broad geographic presence in 50 jurisdictions, although with some dependency on certain individual countries in emerging markets
- » Diversified contract portfolio with 87 contracts and licences
- » Good revenue visibility and proven track record of renewing existing contracts and winning new business
- » Majority of revenues, cash resources and debt obligations outside Greece, thereby mitigating impact of a weak sovereign rating, albeit a degree of exposure to emerging markets

Credit Challenges

- » Increased leverage since 2017 refinancing and additional increases until the end of 2019
- » Limited historic and projected growth and negative free cash flow
- » Significant presence in emerging markets including countries with high political risk such as Turkey
- » Exposure to various regulatory and tax regimes and foreign exchange fluctuations

Rating Outlook

The negative outlook reflects our expectation that leverage will continue to increase into 2019, that free cash flow will remain negative until at least 2020, and that there is considerable uncertainty related to the timing of intended disposals and the use of the potential sale proceeds for debt reductions and/or to improve liquidity, which could hinder any positive movements in Intralot's credit metrics.

Factors that Could Lead to an Upgrade

Given the negative outlook, we do not anticipate any upward pressure on the ratings. A stabilization of the negative outlook could result if the company:

- » Reduces its debt from the proceeds of expected disposals and maintains an adjusted debt/EBITDA of 4x or less;
- » Delivers on its growth strategy for the remaining core business while generating positive free cash flow, and;
- » Stabilizes liquidity.

Factors that Could Lead to a Downgrade

Downward pressure on the ratings could result from:

- » Debt/EBITDA (as adjusted by Moody's) sustainably exceeding 5.0x in any year going forward;
- » Interest coverage (measured as EBIT/interest expense, and as adjusted by Moody's) falling below 1.5x;
- » Deterioration of the underlying cash flow;
- » Weakening of the company's liquidity, or;
- » Materially adverse regulatory changes.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key Indicators

Exhibit 2

Key indicators

Intralot S.A.

KEY INDICATORS [1]

Intralot S.A.

	6/30/2018(L)	12/31/2017	12/31/2016 [2]	12/31/2015	12/31/2014
Net Revenues (USD Billion)	\$1.3	\$1.2	\$1.1	\$1.4	\$2.5
Debt / EBITDA	4.2x	4.3x	4.2x	4.1x	4.1x
EBIT / Interest	2.6x	2.3x	1.6x	1.8x	1.6x
RCF / Debt	9.1%	8.9%	9.4%	5.1%	10.3%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] Pro forma for the new 2017 capital structure; Income Statement metrics exclude discontinued operations.

Source: Moody's Financial Metrics™

Company Profile

Headquartered in Athens, Intralot is a global supplier of integrated gaming systems and services. Intralot designs, develops, operates and supports customized software and hardware for the gaming industry and provides technology and services to state and state licensed lottery and gaming organizations worldwide. Intralot operates a portfolio of 87 contracts and licences across 50 jurisdictions employing approximately 5,100 people. Intralot is listed on the Athens stock exchange and has a market capitalization of c. €90 million as at 14 September 2018.

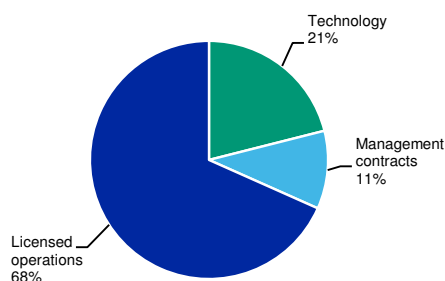
Intralot generated revenues of approximately €1.1 billion and reported EBITDA of €171.5 million in 2017.

The company operates three business activities: (i) **Licensed operations** (68% of 2017 revenues); (ii) **Technology and support services** (21%); and (iii) **Management contracts** (11%).

Exhibit 3

Licensed operations is the largest by revenue

2017 revenues by division

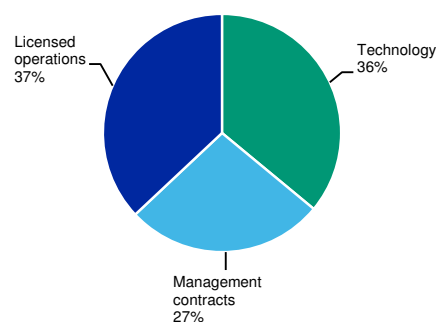


Note: Reported revenues of Licensed operations are gross of payout
Source: Company

Exhibit 4

Licensed operations is the least profitable division

2017 EBITDA by division



Source: Company

Through the **licensed operations** segment - for the most part as direct licence holder - Intralot undertakes and is responsible for setting the odds, choosing the gaming platform, and marketing the games. The company operates under 23 individual licenses which are usually long term, automatically renewable or open-ended, through a combination of wholly and partially-owned subsidiaries, as well as joint ventures, across 11 jurisdictions. The revenue generated from licensed operations is based on the total amount of money

wagered by players on various gaming products in retail locations (own shops, franchisees, etc) or interactive channels, before payout for players' winnings. As direct licence holder Intralot is also responsible for relationships with local regulators.

Intralot's **technology and support services** division includes the supply of technology solutions and support services, with the overall operational responsibility remaining with a state or state-licensed gaming operator. Contracts in this business offering typically include the provision of equipment, software and maintenance services to lottery and gaming organizations pursuant to long-term contracts which provide Intralot with a high level of stable and recurring revenues. These contracts also include the design, development and implementation of software tailored to each jurisdiction and operation. Intralot manages 62 individual technology and support services contracts across 43 jurisdictions through 17 subsidiaries. Revenues in this segment are generated through contract fees which are either (i) a pre-determined fixed percentage of customer sales (amounts wagered by players) or (ii) a fixed payment over the duration of the contract in respect of multi-year contracts. There is also a component of straight equipment and services sales.

The **Management contracts** segment includes the day-to-day operations management of gaming operations, including the provision of technology solutions and the operation of core functions, such as marketing, distribution network development and risk management. Under these contracts, the B2B/B2G customer (the operator of the gaming/lottery operation) typically retains responsibility for certain frontline tasks, such as the management of retailers, cash management, game approvals and other high-level tasks, such as oversight and regulatory control. Intralot manages five management contracts in three jurisdictions through four subsidiaries.

Recent M&A activities and contract development

During 2017 and the first half of 2018, Intralot completed several M&A transactions with the aim to (i) pursue attractive bolt-on acquisitions; (ii) create, in selected countries, strategic partnerships with strong local operators that offer substantial synergies and local market know-how, and; (iii) to exit unprofitable and riskier activities shifting the earnings mix toward developed countries. Significant transactions and contract developments are listed below:

2017

- » In October, 2017, Intralot sold its 50.05% stake in Intralot Caribbean Ventures Limited (ICVL) for \$40 million. ICVL owns 49.9% of Supreme Ventures Limited, a company listed on the Jamaican Stock Exchange, and the company has no further exposure to Jamaica.
- » In October, 2017, Intralot announced the acquisition of the remaining 65% of Maltese gaming technology company Bit8, completing an investment which began in 2015.
- » In December 2017, the company announced the sale of its 51% of share in Slovenske Loterie a.s. that operates VLTs in Slovakia for €1.75 million.
- » In December 2017, the National Betting Authority in Cyprus suspended the license of Intralot's local subsidiary (which represented around 2% of revenues) with effect from December 5, 2017. This is being challenged by the company.
- » In February 2017, Intralot won a ten year contract with the Idaho Lottery to provide Lottery Gaming System services for the Idaho Lottery. The company has been supplying the Idaho Lottery with Gaming systems services since 2007
- » In June 2017, the company announced the renewal of its contract with the Ohio Lottery for the two-year period ending June 30, 2019, consistent with its existing master agreement with the State of Ohio's Controlling Board covering the period 2009-2021 with three two-year extension options (effectively ending in 2027).
- » In July 2017, the company renewed its contract with the Vermont Lottery for the two-year period ending June 30, 2020.
- » In September 2017, the company renewed its contract with the Arkansas Scholarship Lottery for the seven-year period ending August 19, 2026.

2018

- » In January 2018, Intralot announced the completion of the acquisition of the 50% of the Cypriot company "Karinia Enterprises Company Limited" which holds a 30% stake in "Athens Resort Casino S.A.", which has a 51% stake of the Hellenic Casino Parnitha S.A. This transaction will increase the company's footprint in Greece.
- » In February 2018, the company announced the signing of a new contract with Camelot Illinois LLC for the Illinois State Lottery through October 2027. Intralot will install technology solutions in approximately 7,500 retail locations, and the services are planned to transition in December 2018. This contract will boost EBITDA starting in 2019 but there are significant initial capex requirements involved.
- » In February 2018, the company announced the renewal of their contract with the Wyoming Lottery for five years to August 25, 2024. This is the first of three five-year extension options in line with the initial contract terms.
- » In July 2018, the company was informed that the services provided to the Russian state lottery will no longer be provided by Intralot, but the Russian subsidiary will try to expand its market penetration in the Russian gambling market nonetheless. The company is exploring options including legal action. The Russian subsidiary's EBITDA contribution to the company is not material.
- » In July 2018, the company announced a five-year extension (to 2025) of its current gaming systems contract with the New Hampshire Lottery Commission. The partnership with the New Hampshire lottery began in 2010.
- » In July 2018, Gamenet Group announced the acquisition of 100% of Goldbet, which could enhance Intralot's 20% stake in the company, currently worth around €53 million based on Gamenet's market capitalization as at 14 September 2018.
- » In May 2018, the US Supreme Court ruled that PASPA (the Professional and Amateur Sports Protection Act), a 1992 federal law which prohibited states from legalizing sports betting, is unconstitutional, thereby providing growth opportunities for Intralot given its expertise in sports-betting (the company's businesses are around 50% linked to sports-betting).
- » In August 2018 the company announced the signing of a new contract between the Turkish State Organization SporToto and Inteltek, its subsidiary in Turkey, to continue the operation and technical support of the popular fixed odds sports-betting game Iddaa for up to one additional year, starting August 29, 2018.

Detailed Credit Considerations

Good revenue visibility and proven track record of renewing existing contracts and winning new business

Given the long-term nature of Intralot's contracts with its customers (up to fifteen years in tenor with average maturities of eight years) and its historical success in renewing these contracts upon expiration and a c. 42% success rate in winning new tenders, the company benefits from good visibility of its future revenue streams. According to management, as of June 2018, 81% of EBITDA is attributable to contracts that do not expire before 2021, or are periodically renewable provided the licensee complies with the applicable contractual requirements, or are in liberalised markets where the contracts are extended or renewed through a non-competitive process. Contract renewals are strongly supported by the time and cost that would be incurred by clients if they chose a new provider and switched to new technology.

Intralot was facing two material contract expiries in 2018 including the company's largest contract representing 14% of June 2018 LTM EBITDA with SporToto in Turkey, in partnership with Turkcell (Ba2 negative), but this contract was renewed for a further year to August 2019. The company expects to win the 10 year renewal of this contract when due, based on the above mentioned high start-up expense in on-boarding new technology and replacing equipment should a new provider be chosen. The second contract up for renewal in 2018 is the Morocco contract expiring in December which contributed around 6% of LTM June 2018 EBITDA. A one year extension to the biggest part of this contract has also been agreed.

Broad geographic presence but high exposure to emerging markets and various regulatory and tax regimes

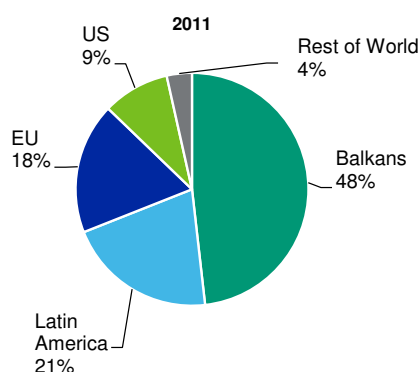
Intralot holds strong positions in numerous gaming markets around the globe in segments like lottery games, sports betting, horse racing, gaming machines, interactive gaming and other activities (e.g. bingo). While historically being strongly reliant on [Greece](#) (B3

positive), Intralot has expanded its operations in recent years and benefits today from a broad geographic reach with presence in 50 jurisdictions.

Although the geographic diversification is credit positive, a substantial portion of Intralot's EBITDA is generated from operations in emerging market countries that pose additional risk to the company as economic conditions in these regions are generally much more fragile. This is reflected in the low sovereign ratings of several of these countries, including Argentina (B2 stable), Azerbaijan (Ba2 stable), and Morocco (Ba1 positive). In particular, Intralot generated around 23% of its LTM June EBITDA from Turkey (Ba1 stable), a country with high political risk and a currency that has devalued around 33% against the euro in 2018. However, a positive effect of the company's M&A activity over the past few years and a growing US business, is the increase in EBITDA contribution from more regulated and stable gaming markets such as the US and Western Europe. This has increased to 42% in 2017 from 28% in 2011.

Exhibit 5

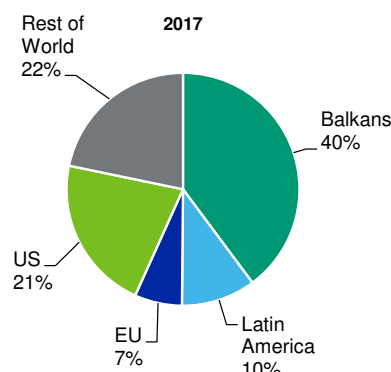
The Balkans and Latin America previously contributed 69% of EBITDA



EBITDA split by region
Source: Company

Exhibit 6

Increasing EBITDA contribution from more stable and regulated markets



EBITDA split by region
Source: Company

Nevertheless, the ability to operate in several jurisdictions and deal with different regulators, combined with an adaptable product offering and scalable business model, could enable Intralot to benefit from the liberalisation trends of the global gaming markets.

Greek sovereign risk mitigated by international revenue generation and availability of offshore liquidity

Despite the fact that Intralot's parent company (Intralot S.A.) has its headquarters in Greece, the company's B2 CFR is above the Greek country ceiling (B3), reflecting marginal exposure to its domestic market in terms of revenues and operating assets since the bulk of its operations are not located in Greece. Since the company generates most of its cash flows outside of Greece and uses them to service the interest and principal payments before being passed to the Greek parent company the sovereign risk to operations is minimal.

The majority of the company's cash is held outside of Greece and the funds kept in Greek banks are modest and used to cover local office expenses and payroll. Under the syndicated bank facilities documentation, the company has to comply with the requirement to maintain less than 40% of the total consolidated cash on deposit with Greek banks and less than 20% with a single Greek bank. In terms of currency fluctuation in countries like Turkey and Argentina it is worth noting that only around 15% of the company's cash deposits are denominated in or linked to currencies other than the euro or US dollar. With the sovereign rating position of Greece becoming more positive recently this risk has further diminished.

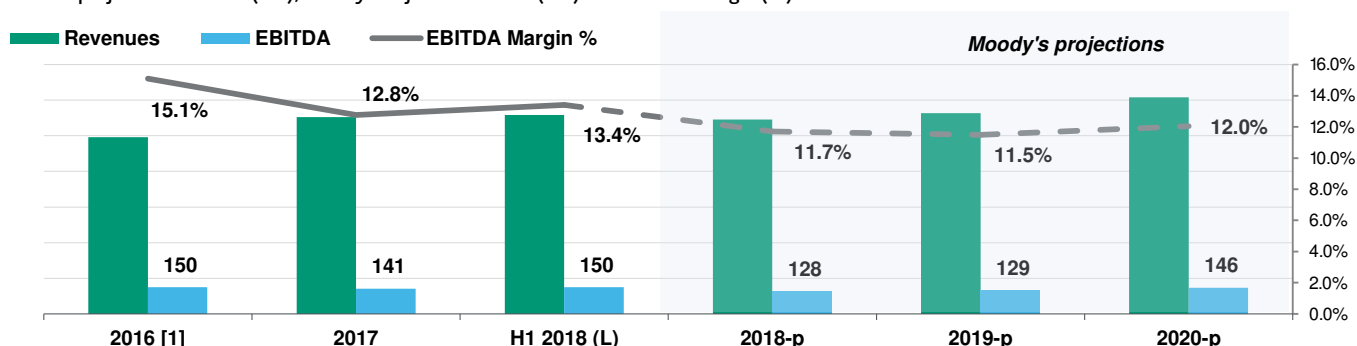
Limited historic and prospective growth and negative free cash flow generation

The substantial capital investment spent historically to grow the business has not translated to any meaningful uplift in EBITDA. Broadly flat since 2012, EBITDA has been hit by (i) unfavourable renewal of certain key contracts and licence/contract withdrawal (Cyprus, Russia); (ii) the roll out of lower margin operations (i.e. video lottery terminals in Italy); (iii) unfavourable foreign exchange movements which are outpacing the mitigant of underlying growth, particularly in Turkey, and ; (iv) as a consequence of the company's M&A activity since 2015. We do not expect EBITDA generation to recover until 2020 when the new US operations are fully functional. Our projections assumptions include further deterioration of the Argentine peso and the Turkish lira.

Exhibit 7

Limited historic and projected EBITDA growth

Historic and projected revenues (€m), Moody's adjusted EBITDA (€m) and EBITDA margin (%)



[2] Pro forma for the new 2017 capital structure; Income Statement metrics exclude discontinued operations.

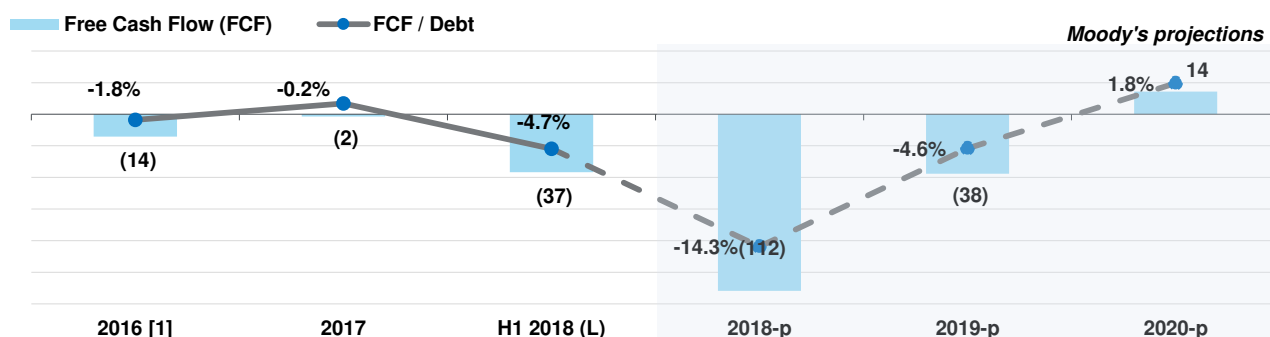
Source: Moody's Investors Service

Intralot's ability to generate free cash flow has been weak, and has been negative for the last three years. This is due to the large capital investments to renew existing licences and grow the top line, fluctuations in working capital as well as significant dividend payments to minorities.

Exhibit 8

Negative free cash flow generation will turn positive in 2020

Historic and projected Free Cash Flow and FCF/Debt



[2] Pro forma for the 2017 capital structure.

Source: Moody's Financial Metrics™

While we anticipate some improvement in the company's organic growth trajectory, free cash flow will continue to be negative in FY2018-2019 driven by capital expenditures primarily for ramping up the US operations in Illinois, but also for other projects as well as dividends to minorities. We however expect Intralot to fund new contracts with balance sheet cash and prospective proceeds from the sale of 20% of Gamenet's shares and/or of other disposals.

Leverage is heading towards 5.0x in 2018, and deleveraging is not expected before 2020

The 2017 refinancing increased leverage to approximately 4.2x in FY2017, and having remained above our leverage ratings trigger for over a year this was a factor in the recent downgrade to B2 CFR. With the expected decrease in EBITDA for FY2018 leverage is approaching 5x and we do not expect any deleveraging before 2020 if relying purely on EBITDA growth. However, leverage and/or liquidity could be improved if potential proceeds from the sale of Intralot's 20% stake in Gamenet and/or of other disposals are used to reduce the debt.

Exhibit 9

Leverage reconciliation**Moody's adjustments to debt and EBITDA**

LTM June - EUR'm	LTM June 18		LTM June 18
Company reported EBITDA	169		
Interest income	7	EUR250m Senior Notes @6.75% due Sept 2021	248
Exchange differences	2	EUR500m Senior Notes @5.25% due Sept 2024	487
Pension expense	1	Other Debt	27
Operating leases expense	4	Finance Leases	4
Other income	3	Total Reported Gross Debt	767
Moody's Adjusted EBITDA	187	Pensions	5
		Operating Leases	18
		Total Moody's Adjusted Debt	790
Moody's Adjusted Leverage			4.2x

Source: Moody's Investors Service

We note that Intralot's consolidated EBITDA is overstated to some extent from an analytical point of view. Since the company holds majority ownership positions in various contracts with some of its key partners as minority shareholders, earnings derived from these contracts are fully consolidated but actually need to be shared. Accordingly, this is not adequately reflected in the calculation of Intralot's leverage metrics based on consolidated results. This also applies to the company's reported cash balance, which is partly located in subsidiaries with substantial minority interests.

Liquidity Analysis

We consider Intralot's liquidity profile to be weak, but adequate for its short term needs. The company's significant near-term cash requirements to support working capital, capital expenditures and dividend payments to minorities are expected to drive negative free cash flow until at least the end of 2019. Although there is a significant consolidated cash balance of c. €195 million as at 30 June 2018, this cash is not fully available since around 30% resides in partnerships and belongs to minorities according their relevant stakes, and there is also a small degree of risk of currency devaluation against the euro. Moody's also notes the requirement for around €60 million of cash for basic operational needs and expects the company to need access to its revolving credit facilities (RCFs) over the next 18 months. The RCFs include two undrawn €40 million facilities both maturing on 30/6/2021 which contain leverage and interest coverage covenants that are currently in the process of being renegotiated due to the risk of being breached if tested. Moody's expects that the RCFs will be reduced to a combined range of €60 million to €70 million, and that they will be successfully renegotiated, but cautions that any failure to renegotiate the covenants in a timely manner will put immediate further pressure on the ratings. The company has stated that its 20% stake in Gamenet Group S.p.A. (B1, stable) which is valued at €53 million based on Gamenet's market capitalization as at 14 September 2018 will be sold at an appropriate time and this could reduce pressure on liquidity.

Structural Considerations

The €500 million 5.250% Senior notes due 2024 and €250 million Senior Notes due 2021 are pari passu. The notes and bank facilities share the same guarantee package, set for a minimum of 70% of the consolidated EBITDA and total assets in the facilities agreements. Moody's notes that the presence of minorities in certain guarantor subsidiaries reduces the potential support available from such entities.

Rating Methodology and Scorecard Factors

The principal methodology used in these ratings was Gaming Industry published in December 2017. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

Exhibit 10

Rating Factors

Intralot S.A.

Intralot S.A.			Moody's 12-18 Month Forward View As of 14/9/2018 [2]	
Gaming Industry Grid [1]			Current LTM 6/30/2018	
Factor 1 : Scale (10%)	Measure	Score	Measure	Score
a) Net Revenues (USD Billion)	\$1.3	B	\$1.3 - \$1.4	B
Factor 2 : Business Profile (30%)				
a) Business Profile	B	B	B	B
Factor 3 : Financial Policy (20%)				
a) Financial Policy	B	B	B	B
Factor 4 : Leverage & Coverage (40%)				
a) Debt / EBITDA	4.2x	Ba	4.5x - 5.2x	B
b) EBIT / Interest	2.6x	Ba	1.4x - 1.9x	B
c) RCF / Debt	9.1%	B	4.0% - 7.5%	B
Rating:				
a) Indicated Rating from Grid		B1		B2
b) Actual Rating Assigned		B2		B2

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjust

[2] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Ratings

Exhibit 11

Category	Moody's Rating
INTRALOT S.A.	
Outlook	Negative
Corporate Family Rating	B2
INTRALOT CAPITAL LUXEMBOURG S.A.	
Outlook	Negative
Bkd Senior Unsecured -Dom Curr	B2/LGD4

Source: Moody's Investors Service

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454