# E4ROW Contribution Campaign Official Document, May 2017

# Summary

Live Player Games LLC (referred to here as "Live Player Games" or "LPG") is an Israel Limited Liability Corporation (Chevrat Baam) whose mission is to develop and popularize digital games and apps that utilize the cryptocurrency Ether ("ETH"). LPG's first major product release has two components: An Android app called "Uncle Finney's Poker" ("UFP"), and an Ethereum smart-contract called E4ROW (the "Escrow Contract") which acts as a secure escrow for UFP and potentially future applications. LPG has created an additional contract called the E4ROW Token Contract (the "Token Contract"). LPG is initiating a "Contribution Campaign" wherein the Token Contract will create and distribute "Tokens" to "Qualified Participants" who contribute ETH to said Token Contract. This document will discuss LPG's current product(s), future development plans, terms of the Contribution Campaign and associated benefits/risks to Contribution Campaign participants.

#### **Disclaimer**

LPG is not selling equity in itself, nor is LPG selling the E4ROW Tokens; rather, LPG has published the E4ROW Escrow Contract and the E4ROW Token Contract on the Ethereum Blockchain for anyone to interact with or ignore. Qualified Participants (as defined below) can send Ether to the E4ROW Token Contract, and the contract will respond automatically by issuing E4ROW tokens to them. These tokens do not grant the buyers any rights, privileges, or ownership in LPG. LPG does not host the E4ROW smart-contract (it is hosted on the Ethereum Virtual Machine); LPG does not execute, nor quarantee, nor take any responsibility for the continued execution of the E4ROW Token contract or Escrow Contract. Further, LPG does not profit from games that use the E4ROW contract; rather, only E4ROW token-holders do. We ask that any such profits be 'incidental' to the motivation of those who participate in the Contribution Campaign, with the primary motivation being to support the stated mission of E4ROW which is to popularize Ether. The Escrow Contract, as executed by the Ethereum Virtual Machine, independently distributes Ether ("distributions") to token-holders without ever sending those distributions to LPG. LPG plays no part in the transfer of distributions to the E4ROW tokenholders. This is not simply a formal distinction: LPG cannot guarantee the continued viability of the Ethereum platform, and plays no part in the operation of Ethereum Smart Contracts that exist on the blockchain. Any benefit to LPG from the sale of E4ROW tokens is purely incidental to the delivery of those tokens to the token-holders -- and does not imply any transfer of value from LPG to the token-holders, nor create any indebtedness or obligation on the part of LPG in favor of the token-holders. All marketing plans and future development plans described in this document are not guaranteed to take place, rather are communicated as statements of plans that may or may not ultimately occur due to any number of factors.

# **Qualified Participants**

U.S. RESIDENTS AND/OR CITIZENS (including Puerto Rico, the U.S. Virgin Islands, and any other territories of the United States) ARE PROHIBITED FROM PURCHASING E4ROW TOKENS, PARTICIPATING IN THE E4ROW CONTRIBUTION CAMPAIGN, OR DOWNLOADING OR UTILIZING UNCLE FINNEY'S POKER ("UFP"). IF THEY DO, THEY TAKE FULL AND SOLE RESPOSIBILITY OF THEIR OWN ACTIONS. Any party that purchases E4ROW tokens, or downloads or utilizes UFP, takes full and sole responsibility for the legality of their actions in the country or jurisdiction that is applicable to them. As Ethereum is a global phenomenon, there is no way for LPG to know who is utilizing its creations, how they are using them, where they are located and what local laws may or may not be applicable. The buyers of E4ROW tokens certify that they are allowed by the laws applicable to them to participate in the E4ROW Contribution Campaign and are allowed by the laws applicable to them to utilize Uncle Finney's Poker. This document represents the full and complete terms of the Contribution Campaign, and no other document, website or verbal representation should be relied upon in the decision to purchase E4ROW tokens. The purchasers of E4ROW tokens certify that they have read and understood this document fully, and understand that they risk losing 100% of the Ether they contribute to E4ROW. Recipients of E4ROW tokens and users of UFP fully release and indemnify a) Live Player Games; b) its employees, owners, investors, and those otherwise involved in the creation of the E4ROW Escrow Contract, the E4ROW Token Contract, UFP and future developments; from any and all liability associated with the Contribution Campaign or use of E4ROW and UFP. "Qualified Participants" as used in this document and other associated material is hereby defined as those qualified per this section.

#### **Not an Online Casino**

Neither UFP, LPG or E4ROW are "online casinos" or "online gambling" entities. No bets, money, ETH or anything of value is ever deposited to -or held on account by LPG. Players do not set up accounts with LPG, rather they simply play head-to-head games against each other using their Ether addresses.

#### **Mission**

LPG's mission is to aggressively expand the universe of ETH users by bringing ETH-based games to the massive global online gaming markets, where legal. The online poker market alone represents millions upon millions of potential new ETH users, many of whom are currently limited to playing poker with valueless 'virtual coins', or who may not be comfortable trusting online casinos with real currency. LPG aims to introduce ETH to these millions of new users and showcase, through its games, ETH's benefits over other currencies, and thereby increase the overall popularity, acceptance and value of ETH.

# **Product Description**

#### Uncle Finney's Poker & E4ROW

Uncle Finney's Poker ("UFP") is a simple, two-player, head-to-head, poker-style contest for Android devices. Players download the free app and engage in a contest with other players wherein they bet ETH against each other. UFP is equipped with an ETH wallet which enables users to send and receive ETH that can be used in the poker game. Unlike online casinos that require users to set up accounts and deposit funds to a potentially untrustworthy entity in advance of playing, with UFP each bet is directly sent to an open-source Ethereum smart-contract called E4ROW ("E4ROW" as used hereafter, refers to the Escrow Contract described in the Summary section). The E4ROW contract acts as a third-party escrow that holds the bets and automatically distributes them to the winner. E4ROW charges a 2% escrow-fee on each pot it awards, and these fees are proportionally distributed to the E4ROW token-holders as "distributions". For additional information, please refer to the UFP and E4ROW websites (www.unclefinneyspoker.com, www.E4ROW.com).

#### **Differentiators**

## A New Frontier Market

Unlike other crypto-ventures that are marketing to the extremely limited, close-knit, technologically savvy community of those familiar with cryptocurrencies, LPG is attempting to break into the infinitely larger market of online/mobile gamers, to create a tidal wave of new ETH users unlike anything previously seen in Ether's history. It is for this reason E4ROW stands for "Ether for the Rest Of the World."

#### Exciting Games, not Simple Random Number Generators

Unlike other crypto-ventures that only demonstrate the raw concept of smart-contract-based gambling via simple random-number-generator games that, in reality, few will likely use on a regular basis (such as simple dice games), UFP is bringing to market exciting, fun, strategic real-world games with millions of existing consumers hungry for new gaming experiences.

#### Ready for Market

Unlike other crypto-ventures that seek to raise crowdfunding based upon vaporware, products in perpetual development, or empty plans, UFP & E4ROW are professionally developed software that are complete, tested, and ready for market. You can download UFP **now**, play poker **now** with real ETH, and see your winnings deposited directly into your ETH wallet. If you participate in the Contribution Campaign and become an E4ROW token holder, your distributions begin to accrue **immediately** thereafter, and are deposited directly to your specified ETH address.

# The Contribution Campaign

LPG is holding a Contribution Campaign to support the following goals:

- Conduct marketing campaigns that will drive players to UFP
- Support the development and marketing of future products and platforms that utilize the E4ROW smart-contract to generate additional distributions to token-holders
- Compensate team members for work already complete
- Compensate angel investors for seed investment

#### Token Structure:

Minimum Capitalization: 5,000 ETH

• Maximum Capitalization: 200,000 ETH

• Price per token: 1 ETH

Duration of Contribution Campaign: 3 weeks

Start Time: May 2, 2017 12:00am GMT

End Time: May 23, 2017 12:00am GMT

• Participation is limited to non-U.S. residents and non-U.S. citizens per the "Qualified Participants" section of this document.

#### Token Rights:

- Token holders will have rights to a share of perpetual escrow fees ("distributions") accrued by the E4ROW smart-contract in proportion to their share of E4ROW tokens
- There are no access, governance, participation or payment rights
- For an analysis of potential gains for token-holders, see the document: "A Profit
  Opportunity: An Ether Based Poker Game Accessible to Non-Ether Users" accessible on
  the E4ROW website.

#### Founder's Tokens:

 Upon the close of the Contribution Campaign, an additional number of tokens will be minted equal to 15% of the total number of tokens sold. These tokens will be allocated to angel investors and the LPG development team. These tokens and distributions will not be released until one year from the Contribution Campaign start date as an incentive for developers to continue to support UFP, E4ROW and future offerings.

# Proof-of-Functionality:

• At the close of the Contribution Campaign, 10% of funds raised will be released. The remaining 90% will only be released if and when the E4ROW contract processes 5,000 games. The purpose of this feature is to prove functionality, stability and capacity of the UFP and E4ROW systems. If this threshold is not met within 90-days of Contribution Campaign close, then the 90% portion of funds raised will be returned to the token purchasers upon their request, and if they do make such request their tokens will be surrendered. The purpose of this 5,000-game usage threshold should not be construed as a proof-of-adoption of UFP, rather is strictly a proof-of-functionality.

#### Use of Proceeds:

Uncle Finney's Poker and E4ROW are the products of a collaboration between a loosely organized efficient group of like-minded software engineers who share the goal of aggressively growing the universe of Ether users. The proceeds from the Token Contribution Campaign will be divided via a web of Ethereum contracts, including the E4ROW Token Contract, and other Ethereum Contracts.

Proceeds will fund future developments that utilize the E4ROW contract (as described in the next section), and reward key contributors to the project; a portion will be held for shared expenses that may be incurred by the developers, such as legal defense, should such be necessary.



- 65% of proceeds will be dedicated to future marketing, operations, legal and development efforts
- 29.2% of proceeds will be allocated to the LPG development team as compensation for work completed over the past year
- 5.8% of proceeds will be allocated to angel investors

#### **Development Plan**

After UFP, LPG is embarking on an ongoing series of new releases and platforms.

#### F-Droid publication

The first deliverable anticipated from the development team is the F-Droid accepted version of UFP. This is essentially a re-build of the tips versing of UFP, but with all open source libraries, and all their dependencies (ad infinitum) downloaded and recompiled. That is, it is a re-build of UFP using 100% source code for all libraries and dependencies.

The reason that it is important to publish programs like UFP on F-Droid is that it provides a measure of confidence to a security-sensitive audience. Since F-Droid rebuilds the project from published source code, and then signs the distributed binary, users can be sure that the code they are running is actually the same as the published code. The published code will likely be inspected by many competent programmers so people can have a high degree of confidence that it does nothing untoward.

Work on this project has been underway for some time. Publication is estimated to be in 30 days from the opening of the Contribution Campaign.

#### Texas Hold 'Em

Uncle Finney's Texas Hold 'Em is the next game offering in development, and promises to be a more exciting game as well as more profitable for E4ROW token-holders. Texas Hold 'Em is the most popular version of poker, and differs from 5-card stud in that each player only gets 2 cards of their own -- with up to 6 other cards shared among all players. Ultimately each player makes their hand from the best 5 cards from the shared cards and their private (hole cards). The two-player version of Texas Hold 'Em is often called 'Heads Up'.

Texas Hold 'Em is a perfect addition to UFP for the following reasons:

- It is an extremely popular card game;
- Players tend to bet more, (generating greater returns for token-holders) because there
  are several betting rounds: the 'blinds', before the 'flop', 'fourth street', 'fifth street', and
  the 'river'.
- Engineering-wise, it is a natural extension to UFP, and will re-use much of the same code base;
- much of the same marketing can be easily re-purposed.

The main development work in Texas Hold 'Em is in the Android (Java) app. Most of the code for the Welcome screen, the Purchase-Ether feature, the Ether wallet, the player matching, and the Ethereum Balance and Transaction Processor can be reused from UFP with little or no modification. There will be some significant changes to the actual poker logic, and the encrypted dealing; and some upgrades to the graphic assets. Also much if the back-end logic can be borrowed from UFP; in particular we will have a much shortened development cycle due to the lessons learned regarding the UFP interactions with E4ROW. The estimated time for releasing a beta version of this product is approximately 120 days from the Contribution Campaign, including QA.

#### Snap-Shot

Snap-Shot is LPG's first head-to-head shooter game. It provides for a monetary bet over a skill contest (shooting a rubber-band at your opponent through a moving wall). Snap-Shot effectively targets a different (however overlapping) segment than UFP -that is the pure gamer market vs. the poker market. The program is written for Android. It shares much of the code with UFP, including the Ether wallet and balance and transaction processor. The Back-end server code likewise has a few modules in common with UFP -- but of course the game logic is completely un-related. Currently this project is on-hold until the F-Droid port is complete. Estimated re-start time on this is 30 days from Contribution Campaign. Then estimated release is 90 to 120 days later.

#### Client-Side implementations of Games

Both Uncle Finney's Poker and Uncle Finney's Head-Up Poker will be ported to web-client

based implementations. Work on this has not yet begun. The code will be written in JavaScript. As currently envisioned, these projects will be limited implementations of their Android counterparts. The wallet code would essentially be a port of MyEtherWallet, and there would be no feature to purchase Ether. The game code would be 100% compatible with the back services for the Android versions, so should not require any spin on that code. We will need to re-work some of the graphic assets. The estimated time frame for releasing these product is approximately 150 days from Contribution Campaign, including QA.

### **IOS Ports**

Parallel to new game development, we will begin on IOS ports of the most popular games. Estimated start time for IOS ports is in 6 months from Contribution Campaign.

# Maintenance of UFP and other games

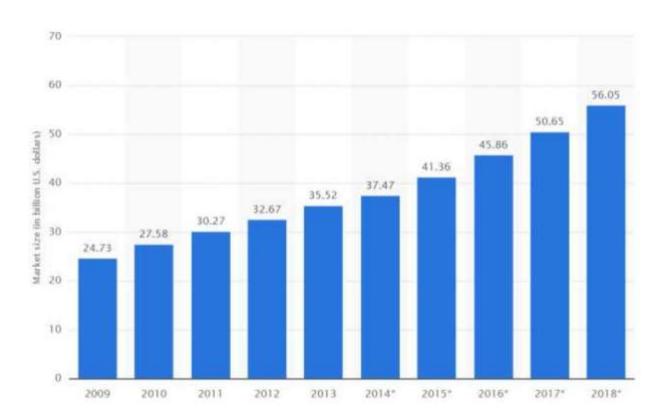
LPG's development team is fully cognizant that big changes are coming to ETH. POS will likely reduce block times drastically, and therefore open up opportunities for even faster games and a better user experience. We anticipate other Ethereum developers will publish games competing for Ether users' attention -- and for the most part we do not see ourselves as competitors to such projects, since we are focused primarily on the market of non-Ether users. However, these "competing" projects will raise the bar -- and we need to stay nimble to keep our games "best in class". This maintenance work is a priority.

# **Market Analysis**

UFP is targeting four key markets:

- Online Poker
- Live Poker Players
- Online/Smart-Device Gamers
- The Bitcoin and Ether communities

# Size of the online gambling market from 2009 to 2018 (in billion U.S. dollars)



The chart above shows the size of the global online gambling market from 2009 to 2013, with forecasted figures from 2014 to 2018. In 2013, the online gaming market had a volume of 35.5 billion U.S. dollars. (source: www.statista.com)

# Online Gambling

Per www.statista.com, the market volume of online gaming was forecasted to reach 56.05 billion U.S. dollars in 2018, more than doubling since 2009.

Per Research and Markets' report "Global Online Gambling Market - by Type, Device, Regions - Market Size, Demand Forecasts, Industry Trends and Updates (2014-2020): The global online gambling market was 35.97 billion USD in 2014 and is estimated to reach 66.59 billion USD by 2020, at a CAGR of 10.81%. The use of mobile devices for online gambling purposes is increasing. The market growth for this industry is very geography specific.

# Global Implications

More than 80 nations have legalized online gambling and Europe has the largest online gambling market in the world, and this is just going to increase as Netherlands adopts new online gambling regulations. In Asia Pacific region, the online gambling sector has not grown much, as there has been no scope.

In countries like Singapore, the government has made many forms of gambling illegal and thus markets do not exist there as such. Similarly, in China and South Korea gambling sites were considered illegal and shut down.

While in the USA, three states already allow online gambling, and it is expected that more states are going to adopt similar regulations, allowing the market to grow in these regions, as the government want to benefit from the tax revenues. In Africa also similar to Asia there has been no plans for legalizing online gambling anytime soon.

According to a comprehensive study conducted by Poker Player Research:

- 2.6% of all adults play online poker for real money
- 3.8% of all adults in the U.S. play online poker for real money
- 3.2% of all adults in Canada play online poker for real money
- 3.2% of all adults in U.K. play online poker for real money
- 6.2% of all adults in Scandinavia play online poker for real money
- 1.3% of all adults in France play online poker for real money
- 1.2% of all adults in Germany play online poker for real money
- 4.0% of all adult males play online poker for real money
- 1.2% of all adult females play online poker for real money
- 5.0% of all adults aged 18-34 play online poker for real money
- 7.2% of all males aged 18-34 play online poker for real moneyVERSION 3.9

#### Live Poker

Per the same study conducted by Poker Player Research:

40 million people play poker regularly (6.8% of the adult population)

23 million of these regular players are in the U.S. (10.1% of the U.S. adult pop.)

15 million in total play online for real money (2.6% of the adult pop.)

7 million play online for real money at least once a month (1.4%)

5 million play for real money at least once a month in "Home Games" (1.1%)

2 million play for real money at least once a month in "Private Clubs" (0.4%)

10 million have played in a casino in the last year (1.6%)

Of the 15 million online money players, 76% are male

Of the 15 million online money players, 58% are under 35 years of age

While this data is from 2010, it still gives an indication of the massive size of the subject market and tells something about the target audience.

#### Online/Smart-Device Gamers

According to a report by Statista, "Mobile media is taking our lives by storm. The time Americans spend with mobile, non-voice content is expect to grow by nearly 461 percent over a period of seven years, from 46 minutes in 2011 to an estimated 258 minutes in 2017. In this period the growth rates were projected to be dropping, from a high of 96 percent in 2011 to 5.2 percent in 2017. In comparison, the use of all media grew on average by three percent in this time and print media consequently reported negative growth.

Mobile games contribute greatly to the high growth rate of mobile media use. On the global level, in 2014 the industry generated 24.4 billion U.S. dollars in revenue, out of which 17 billion was attributed to smartphone gaming and the remaining 7.4 billion to tablet gaming. The total figure is expected to grow to more than 44.2 billion by 2018. That same year smartphone games are estimated to account for 32 percent of the games market revenue, and together with tablet gaming revenues that number will add up to 43 percent. In terms of consumers, sources calculated that in mid 2014, there were 1.48 billion mobile gamers worldwide; half of them were located in the Asia Pacific region. North America came fourth, after MENA and Western Europe, with 152 million mobile gaming enthusiasts.

Certain studies have taken a deeper look into consumer behavior when it comes to mobile gaming. As of 2014 men in the United States appeared to have downloaded slightly more games to their mobile devices than women. In fact, at that time, women were below the national average of mobile game downloads which amounted to 2.76 per month. American mobile gamers between the ages of 18 and 24 were reported to have the highest average of games downloaded on a monthly basis, followed by 25 to 34 year olds, with 2.77 game installs per

gamer among that age group. All in all, in 2014, 46 percent of U.S. mobile phone users were gaming on their devices. A year later the penetration of mobile gaming in the United States surpassed 50 percent and it is projected to grow to 63.7 percent in 2020.

#### Bitcoin and Ether Communities

It is nearly impossible to accurately estimate how many people own and use cryptocurrencies. The primary reason is the inherent anonymity in these technologies, and the fact that individuals can have multiple addresses.

We can try to quantify how many Bitcoin and ETH exist in the universe, quantify how many addresses there are, and try to approximate how many individual members there are in these communities, but regardless of the metrics certain conclusions about this market can be immediately reached:

- The cryptocurrency community is very tight. They read a limited selection of message boards and blogs; word spreads quickly in the community; and there is great interest in new crypto-ventures.
- While not a large market -especially compared to that of poker or online gaming, it is an
  easy audience to reach; one that it likely to try out new crypto-products; and one that
  provide honest, intelligent and therefore valuable feedback. These will be our early
  adopters.

For these reasons, we consider the cryptocurrency communities to remain one of our key targets despite its likely modest relative size.

#### Risks to Purchasers of Tokens

Those who choose to participate in the Contribution Campaign should do so with the primary motivation of supporting the stated mission of E4ROW - that is to popularize Ether by creating entertaining apps that involve Ether for the mobile/online gaming markets. While token-holders may enjoy returns in the form of a proportional share of escrow fees earned by the E4ROW contract, we ask that any such returns be incidental to the motivation of those who participate in the Contribution Campaign. For this reason, no guarantee of any kind is implied or should be construed as being given, in regards to any financial returns from the purchase of tokens.

When undertaking any sort of project of this import, it is prudent to remain vigilant to the pitfalls and potential missteps that could lead us to fall short of our aspirations. Some of these risks are:

- The game might not appeal to poker players Poker players seem to be selective regarding their favorite games. This fact can cut either to our benefit, or to our detriment. On the one hand, it means that we might get a loyal player following; on the other hand, it is possible that the majority of players could shun the game completely. This risk is somewhat mitigated by the huge size of the poker market, and by the fact that we have only projected acquisition of such a small percentage of that market.
- Competition At this time there are a number of Ethereum-based poker projects in the works. These include EDGELESS (https://edgeless.io/) and EtherPoker (http://www.ibtimes.co.uk/etherpoker-raising-stakes-ethereum-1551331). These projects and others might accelerate due to upcoming changes in the Ethereum platform, specifically Proof-of-Stake (https://github.com/ethereum/wiki/wiki/Proof-of-Stake-FAQ). Uncle Finney's Poker should enjoy a market advantage based on the fact that it is ready now. Also, it should be clear, the market that UFP addresses is large enough for several independently successful games. Nevertheless, competition cannot be ignored as a risk.
- The Ethereum platform could become unstable During 2016, the Ethereum platform was subjected to several denial-of-service attacks that sometimes rendered the platform largely unusable. While Ethereum enthusiasts were hardly dissuaded due to these "hiccups," the non-Ether markets might be less forgiving.
- The game could malfunction UFP is comprised of a front-end (smartphone-app), a backend server which manages the flow of the game, and the E4ROW smart-contract, which acts an escrow for the bets. While we like to think that we've engineered UFP flawlessly, it is inevitable that bugs will crop up somewhere. In case of severe bugs, it is easiest to modify the back-end server, as this can happen "behind the scenes." However, the front-end program can be also be upgraded, although that would require some cooperation from the users (there is already a provision in the code to notify users that a new version of the app is available). The escrow fees generated by the E4ROW contract are distributed to E4ROW token holders via a secondary contract (the E4ROW Token contract). That means that in case of an extreme bug, even the E4ROW contract could theoretically be replaced with an upgraded version, which would also pass escrow fees to the same token contract. All of the forgoing means that if and when bugs crop up, it will be possible to deal with them. Nevertheless, bugs can cause down-time to the system and sour the user experience sufficiently to drive players away.

- Legal LPG or UFP's developers could become subject to legal action that could prevent us from realizing our mission. While we feel that we do not in any way qualify as an 'online casino' for a multitude of reasons, law enforcement agencies may disagree.
- LPG could become insolvent and cease to maintain its software or create new offerings. This is a risk of any company, but should be stated.

For all the above and other risk factors that we could not imagine, we ask that those who purchase tokens simply do so as a contribution to our mission with no expectation of return, with the firm knowledge that we have demonstrated through our work to date an honest desire to create professional software that introduces Ether to the rest of the world.

# **Legal Considerations Regarding Online Gambling**

Government laws regarding gambling vary widely from place to place, and there is no way for us to know how restrictive governments are about gambling everywhere the game might be played. It is solely the players' responsibility to determine what is legal in their particular jurisdiction, and to assess the strictness of their own local regulatory and law enforcement agencies. Upon the initial installation of UFP, users are asked to certify that they take full responsibility for their actions in the legal jurisdiction in which they exist.