# COGNETIVITY NEUROSCIENCES LTD. Annual Information Form For the Year Ended January 31, 2021

November 10, 2021

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## **PRELIMINARY NOTES**

#### Introduction

This Annual Information Form ("AIF") has been prepared in accordance with Form 51-102F2 and should be read in conjunction with Cognetivity Neurosciences Ltd.'s ("we", "our", "us", the "Company", "Cognetivity") audited consolidated financial statements (and accompanying notes) for the year ended January 31, 2021 and Management's Discussion and Analysis for the year ended January 31, 2021. These documents, along with additional information about Cognetivity are available at <a href="https://www.cognetivity.com">www.cognetivity.com</a> and under Cognetivity's issuer profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

The word Cognetivity refers to Cognetivity together with its subsidiaries and/or the management and employees of the Company (as the context may require).

All information in this AIF is given as of November 10, 2021 unless otherwise indicated.

All dollar figures are stated in Canadian Dollars unless otherwise indicated.

## **Forward-Looking Statements**

This AIF contains certain forward-looking statements and forward-looking information (collectively, "forward-looking statements") which relate to future events and/or Cognetivity's future business, operations, and financial performance and condition. Forward-looking statements normally contain words like "will", "intend", "anticipate", "could", "should", "may", "might", "expect", "estimate", "forecast", "plan", "potential", "project", "assume", "contemplate", "believe", "shall", "scheduled", and similar terms and, within this AIF, include any statements (express or implied) respecting Cognetivity's:

- future plans, strategies, and objectives, including plans, strategies, and objectives arising out of the COVID-19 pandemic;
- impact of the COVID-19 pandemic on its business, operations, prospects, and financial results, including, without limitation, greater/continued remote working and/or distance learning and the effects of governmental lockdowns, restrictions, and new regulations on our operations and processes, business, and financial results;
- future trends, opportunities, challenges, and growth in its industry, including as a result of COVID-19;
- the achievement of advances in and expansion of its technology platforms;
- ability to maintain and enhance its competitive advantages within its industry and in certain markets;
- ability to achieve regulatory approval in North America and elsewhere in the world.
- product and research and development strategies and plans;
- privacy and data security controls;
- seasonality of future revenues and expenses;
- future availability of working capital and any required additional financing;
- future fluctuations in applicable tax rates, foreign exchange rates, and/or interest rates;
- future availability of tax credits;
- addition and retention of key personnel;
- increase to brand awareness and market penetration;

- future corporate, asset, or technology acquisitions;
- strategies respecting intellectual property protection and licensing;
- potential future litigation or product liability;
- foreign operations; and
- economic and market uncertainty.

Forward-looking statements are provided for the purpose of presenting information about management's current expectations and plans relating to the future and allowing investors and others to get a better understanding of our anticipated financial position, results of operations, and operating environment. Readers are cautioned that such information may not be appropriate for other purposes. Forward-looking statements are not a guarantee of future performance, actions, or developments and are based on expectations, assumptions, and other factors that management currently believes are relevant, reasonable, and appropriate in the circumstances. The material expectations, assumptions, and other factors used in developing the forward-looking statements set out herein include or relate to the following, without limitation, Cognetivity

- will be able to successfully execute its plans, strategies, and objectives;
- will be able to successfully manage the impacts of COVID-19 on its business, operations, prospects, and financial results;
- will be able to successfully manage cash flow, operating expenses, interest expenses, capital expenditures, and working capital and credit, liquidity, and market risks;
- will be able to leverage its past, current, and planned investments to support growth and increase profitability;
- will be able to generate revenue once its technology platform is introduced into the market:
- will maintain and enhance its competitive advantages within its industry and markets;
- will keep pace with or outpace the growth, direction, and technological advancement in its industry;
- will be able to source and provide industry data and projections that are accurate and reliable;
- will be able to design, develop, and enhance its technology platform;
- will be able to protect against the breach of data that it may process, store, and/or manage;
- expects revenues to not become subject to increased seasonality;
- expects future financing will be available to Cognetivity on favourable terms if and when required;
- will not be exposed to material fluctuations in applicable tax rates, foreign exchange rates, and interest rates;
- will continue to access certain tax credits;
- will be able to attract and retain key personnel;
- will be successful in its brand awareness and other marketing initiatives;
- will be able to successfully integrate businesses, intellectual property, products, personnel, and/or technologies that it may acquire (if any);
- will be able to maintain and enhance its intellectual property portfolio;
- will have sufficient protection of its intellectual property and will not have its technology materially infringe third party intellectual property rights;
- will be able to obtain any necessary third-party licenses on favourable terms;
- will not become involved in material litigation;

- will not face any material unexpected costs related to product liability;
- will not have foreign jurisdictions that impose unexpected risks;
- will not have economic and market conditions (including, without limitation, as affected by the COVID-19 pandemic) that impose unexpected risks or challenges; and
- will maintain or enhance its accounting policies and standards and internal controls over financial reporting.

Although management believes that the forward-looking statements in this AIF are reasonable, actual results could be substantially different due to the risks and uncertainties associated with and inherent to Cognetivity's business, including the following risks (as more particularly referred to in the "Risk Factors" section of this AIF):

- Cognetivity has limited operating history;
- Cognetivity may not be able to prevent damages resulting from a cybersecurity attack;
- damage to Cognetivity's brand may harm its results;
- the business of Cognetivity is subject to broader economic factors;
- Cognetivity operates in a highly competitive industry and may be unable to retain clients or market share;
- Cognetivity's research and development efforts may not be successful;
- Cognetivity's business may suffer if it cannot continue to protect its intellectual property rights;
- Cognetivity may be unable to obtain patent or other proprietary or statutory protection for new or improved technologies or products;
- Cognetivity faces fluctuating foreign exchange rates;
- the price of the Common Shares may be volatile;
- the market price of the Common Shares may decline due to the large number of convertible securities issued and outstanding Common Shares eligible for future sale;
- Cognetivity is reliant on key management;
- Cognetivity may be subject to litigation;
- risks related to Cognetivity's foreign operations;
- alignment of Cognetivity's cost structure with revenue;
- lenders may penalize or otherwise take action against Cognetivity if it is unable to meet its obligations under financial instruments;
- there are risks inherent in Cognetivity's acquisition strategy;
- directors and officers of Cognetivity may be subject to conflicts of interest;
- Cognetivity does not anticipate paying dividends on the Common Shares;
- Cognetivity may not be able to obtain financing necessary to implement its business plan;
- management has discretion concerning unallocated funds;
- disease outbreaks may negatively impact Cognetivity;
- Cognetivity may issue additional equity securities, or engage in other transactions that could dilute its book value or affect the priority of the Common Shares, which may adversely affect the market price of Common Shares;
- Cognetivity is a holding company with its only material assets being its wholly-owned subsidiary, Cognetivity Ltd.
- Income tax related risks;
- Cognetivity's business could be disrupted as a result of actions of certain shareholders or potential acquirers of Cognetivity; and

• Cognetivity's reliance on copyrights, trademarks, trade secrets, confidentiality procedures and similar contractual provisions.

Additional material risks and uncertainties applicable to the forward-looking statements herein include, without limitation, unforeseen events, developments, or factors causing any of the aforesaid expectations, assumptions, and other factors ultimately being inaccurate or irrelevant. Many of these factors are beyond the control of Cognetivity. All forward-looking statements included in this AIF are expressly qualified in their entirety by these cautionary statements. The forward-looking statements contained in this AIF are made as at the date hereof and Cognetivity undertakes no obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events, or otherwise, except as may be required by applicable securities laws.

## **Industry and Market Data**

Information contained in this AIF concerning the industry and the markets in which Cognetivity operates, including Cognetivity's perceived trends, market position, market opportunity, market share, and competitive advantages within the markets in which it operates, is based on information from independent industry analysts and third party sources (including industry publications, surveys, and forecasts), Cognetivity's internal research, and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and other third party sources, as well as data from Cognetivity's internal research, and are based on assumptions made by Cognetivity from such data and its knowledge of its industry and markets, which management believes to be reasonable. Certain sources utilized in this AIF have not consented to the inclusion of any data from their reports, nor has Cognetivity sought their consent. Cognetivity's internal research has not been verified by any independent source and Cognetivity has not independently verified any third-party information. While Cognetivity believes the market opportunity and market share information included in this AIF is generally reliable, such information is inherently imprecise. In addition, projections, assumptions, and estimates of Cognetivity's future performance and the future performance of the industry and the markets in which Cognetivity operates constitute forward-looking statements herein and are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those referred to in the "Risk Factors" and other sections of this AIF.

## **Trademarks**

The following logo is a trademark of Cognetivity:



Other names or logos mentioned herein may be the trademarks of Cognetivity or their respective owners. The absence of the symbols  $^{\text{TM}}$  and  $^{\text{R}}$  in proximity to each trademark, or at all, herein is not a disclaimer of ownership of the related trademark.

## **CORPORATE STRUCTURE**

## Name, Address, and Incorporation

The Company was incorporated on December 11, 2015 under the Business Corporations Act (British Columbia). On December 19, 2017, the Company changed its name from "Utor Capital Corp." to Cognetivity Neurosciences Ltd.

The address of the Company's corporate office is 2250 – 1055 West Hastings Street, British Columbia V6E 2E9. The address of the Company's registered office is 1500 – 1055 West Georgia Street, Vancouver, British Columbia V6E 4N7.

On December 19, 2017, the Company amended its articles to create certain rights and restrictions for its class B preferred convertible shares ("Class B Shares"). See "Description of Capital Structure" below.

The common shares of the Company ("**Common Shares**") are traded on the Canadian Securities Exchange ("**CSE**") under the ticker symbol "CGN", on the Frankfurt Stock Exchange ("**FSE**") under the ticker symbol "1UB" and on the OTCQB Venture Market ("**OTCQB**") under the ticker symbol "CGNSF".

## **Incorporate Relationships**

On December 21, 2017, Cognetivity acquired 100% of the issued and outstanding common shares of Cognetivity Ltd. ("**Cognetivity UK**"). Cognetivity UK was incorporated on April 10, 2013 under the United Kingdom Companies Act 2006. Cognetivity UK is the only whollyowned subsidiary of the Company.

## **GENERAL DEVELOPMENT OF THE BUSINESS**

#### **Three Year History**

Prior to the acquisition of Cognetivity UK, the Company had no operating business and was actively pursuing business opportunities. The Company's principal business activity, through its wholly-owned subsidiary, Cognetivity UK, is the development of cognitive testing platform for use in medical, commercial and consumer environments.

## Year Ended January 31, 2019

In the year ended January 31, 2019, the Company had the following major product and operational achievements:

- On March 19, 2018, the Common Shares began trading on the CSE under the ticker symbol "CGN".
- On May 3, 2018, the Common Shares began trading on the FSE.
- On May 3, 2018, the Company also announced the granting of incentive stock options ("**Stock Options**") to consultants of the Company to purchase up to 100,000 Common Shares at an exercise price of \$0.43 and exercisable on or before June 22, 2023.

- On September 4, 2018, the Common Shares began trading on the OTCQB.
- On September 10, 2018, the Company announced the launch of its key clinical validation trial of its artificial intelligence ("AI")-powered dementia detection technology at the South London and Maudsley NHS Foundation Trust ("SLAM NHS Trust") and in conjunction with the Institute of Psychiatry, Psychology & Neuroscience at King's College London.
- On September 17, 2018, the Company announced that it received two key patent application approvals from the European and United States Patent Offices. The patents were granted against the Company's proprietary Integrated Cognitive Assessment (the "ICA"), an AI system to assess mental health disorders in humans.
- On November 6, 2018, the Company entered into an agreement with Dacadoo, a global provider of digital health platforms, to provide the Company's 'at home', non-clinical cognitive assessment tool for Docadoo's client base of major life and health insurance providers.
- On December 12, 2018, the Company announced the granting of 100,000 Stock Options to an employee and 150,000 Stock Options to a consultant of the Company exercisable at a price of \$0.41 for a period of five and three years respectively.
- On January 24, 2019, the Company entered into an agreement with Dementias Platform UK ("**DPUK**") to become its ninth industry partner (the "**DPUK Agreement**"). Under the DPUK Agreement, the ICA testing platform would be one of the select cognitive testing tools made available by DPUK to studies involving its cohorts over 2 million individuals from over 50 long-term studies of health.

## Year Ended January 31, 2020

In the 2019 fiscal year, the Company had the following major product and operational achievements:

- On March 13, 2019, the Company announced that Cognetivity UK received ISO 13485:2016 certification for its quality management system following review by Lloyd's Register Quality Assurance Limited. ISO13485:2016 is an internationally recognized quality standard specific to the medical device industry. The certification is a critical prerequisite to securing regulatory approval around the world, including CE European mark certification ("CE Marking") and other regulatory certifications.
- On March 19, 2019, the Company announced completion of a non-brokered private placement of 3,084,500 units at a price of \$0.38 for gross proceeds of \$1,172,110.
   Each unit consisted of one Common Share and one-half common share purchase warrant. Each whole purchase warrant entitled the holder to purchase an additional Common Share at a price of \$0.55 for a period of 18 months after closing.
- On May 2, 2019, the Company appointed digital health specialist, Rob Broughman as the Head of Commercial Development.
- On August 13, 2019, the Company announced that it received formal approval from

the China National Intellectual Property Administration ("CNIPA"), for its patent covering the Company's unique system for assessing mental health disorders. The patent covers a number of key elements of the Company's proprietary cognitive assessment platform including the type and durations of images displayed, the capturing of responses, the methods of analysis used and the use of the system for the detection of dementia and Alzheimer's disease ("Alzheimer's").

- On August 14, 2019, the Company entered into convertible loan agreements with certain lenders and issuers of convertible notes in the aggregate principal amount of up to \$168,000. The notes bear interest at 8% per annum and mature 12 months from the date of issuance (the "August 2019 Note Maturity Date"). At any time prior to the August 2019 Note Maturity Date on at least 10 days prior written notice to the Company, the lender may, in its sole discretion, elect to convert all, but not less than all, of the principal amount, all accrued and unpaid interest and all other amounts due by the Company to the lender pursuant to the note (the "October 2019 Note Indebtedness") into a number of units of the Company equal to the quotient of the October 2019 Note Indebtedness and \$0.26. Each unit is comprised of one Common Share and one share purchase warrant of the Company. Each share purchase warrant entitles the holder thereof to acquire one Common Share at \$0.30 per Common Share for two years. The notes and all securities issued in connection with the notes were subject to a statutory hold period of four months and a day from the date of issuance in accordance with applicable securities law.
- On September 26, 2019, the Company entered into a convertible loan agreement with Sina Habibi, the Chief Executive Officer and Director of the Company, and issued a convertible note in the aggregate principal amount of \$164,110. The note bears interest at 8% per annum, and matures 12 months from the date of issuance (the "September 2019 Note Maturity Date"). At any time prior to the September 2019 Note Maturity Date on at least 10 days prior written notice to the Company, the lender may, in its sole discretion, elect to convert all, but not less than all, of the principal amount, all accrued and unpaid interest and all other amounts due by the Company to the lender pursuant to the note (the "September 2019 Note Indebtedness") into a number of units of the Company equal to the quotient of the September 2019 Note Indebtedness and \$0.13. Each unit is comprised of one Common Share and one share purchase warrant of the Company. Each share purchase warrant entitles the holder thereof to acquire one Common Share at \$0.15 per Common Share for two years. The note and all securities issued in connection with the note were subject to a statutory hold period of four months and a day from the date of issuance in accordance with applicable securities law.
- On October 10, 2019, the Company confirmed positive progress in the clinical validation and commercial development of its ICA. The Company also announced it achieved considerable expansion in its clinical recruitment base by establishing research affiliations with a number of additional institutions, including the UK National Health Service ("NHS") across ten sites, including SLAM NHS Trust and Sussex Partnership NHS Foundation Trust ("Sussex NHS Trust"), which were ranked as the top two mental health trusts for research activity in England by the National Institute for Health Research.

- On October 23, 2019, the Company announced it received a \$293,155 grant from Innovate UK, the UK's government-funded innovation agency, to further develop its ICA (the "Grant"). The Company will use the Grant to conduct ADEPT (Accelerating Dementia Pathway Technology) ("ADEPT"), a 12-month project deploying the ICA into existing healthcare pathways to analyze its potential to outperform current testing techniques (the "ADEPT Study"). Whilst the efficacy of the ICA in detecting the earliest signs of cognitive decline had already been demonstrated, ADEPT aims to demonstrate the health economic benefits of the ICA and develop the technical features required to embed the ICA seamlessly into existing clinical pathways. The project will be run in partnership with Alzheimer's Research UK, the UK's leading dementia research charity, and Sussex NHS Trust.
- On October 23, 2019, the Company also announced the granting of 100,000 Stock Options to a consultant of the Company exercisable at a price of \$0.45 per Common Share for a period of 3 years from the date of the grant.
- On October 29, 2019, the Company confirmed that it assessed sufficient participants in the clinical evaluation study of the ICA platform to register for CE Marking.
- On November 13, 2019, the Company also announced that it entered into a debt settlement agreement with an arms-length party to settle an aggregate of \$114,907 in debt. In settlement of the debt, the Company issued an aggregate of 450,617 Common Shares (the "November 2019 Debt Shares") at a deemed price of C\$0.255 per November 2019 Debt Share. The debt will be completely satisfied and extinguished upon the issuance of the November 2019 Debt Shares.
- On December 19, 2019, the Company registered the ICA for CE Marking with the UK's Medicines and Healthcare Products Regulatory Agency.
- On January 7, 2020, the Company announced that the ICA was approved for CE Marking, enabling the ICA to be sold as a diagnostic aid in the UK, throughout the European Economic Area and in other jurisdictions that accept the CE Marking.
- On January 30, 2020, the Company announced completion of a non-brokered private placement of 3,002,977 units at a price of \$0.18 per unit for gross proceeds of \$540,536. Each unit consisted of one Common Share and one-half common share purchase warrant. Each whole warrant entitled the holder to purchase an additional Common Share at a price of \$0.25 for a period of 24 months after closing.

## Year Ended January 31, 2021

In the 2020 fiscal year ("**F2020**"), the Company had the following major product and operational achievements:

- On February 18, 2020, the Company announced that it is developing a novel smartphone app focused on the personalized tracking and management of cognitive performance and designed for use in non-clinical environments but will be powered by the same technology as the ICA ("OptiMind").
- On February 18, 2020, the Company also announced that it entered into a debt

settlement agreement with an arms-length party to settle an aggregate of \$85,250 in debt. In Settlement of the debt, the Company issued an aggregate of 405,952 Common Shares (the "**February 2020 Debt Shares**") at a deemed price of \$0.21" per February 2020 Debt Share. The debt will be completely satisfied and extinguished upon the issuance of the February 2020 Debt Shares.

- On February 18, 2020, the Company also announced that it granted 100,000 Stock Options to an employee of the Company exercisable at a price of \$0.21 per Common Share for a period of 5 years from the date of the grant.
- In March 2020, the World Health Organization declared coronavirus (specifically identified as COVID-19) a global pandemic. This contagious disease outbreak resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which included the implementation of travel bans, self-imposed quarantine periods and social distancing, had caused material disruption to businesses globally resulting in significant economic uncertainty. These measures adopted by various governments worldwide could impact the Company's business whether through supply chain or demand. However, it was not possible for the Company to reliably estimate the duration or magnitude of the adverse results of the outbreak and its impact on the Company's financial results in future periods. See "Risk Factors".
- On May 8, 2020, the Company issued 10,000,002 Common Shares upon the conversion of 10,000,000 Class B Shares of the Company, which were automatically converted into Common Shares for no additional cost upon the ICA being approved for CE Marking (the "Conversion of Class B Shares").
- On May 8, 2020, the Company also announced that it entered into a debt settlement agreement with an arms-length party to settle an aggregate of \$56,340 in debt. In settlement of the debt, the Company issued an aggregate of 315,616 Common Shares (the "May 2020 Debt Shares") at a deemed price of \$0.18 per May 2020 Debt Share. The debt will be completely satisfied an extinguished upon the issuance of the May 2020 Debt Shares.
- On May 8, 2020, the Company also announced that it entered into a restricted share unit agreement with a consultant of the Company to grant 332,000 restricted share units (the " Restricted Share Units") with a trigger date of May 1, 2022. All of the 332,000 Restricted Shares Units awarded to the consultant will expire on September 30, 2023.
- On September 29, 2020, the Company announced that it reached an agreement to deploy the ICA in clinical care with North Staffordshire Combined Healthcare NHS Trust, one of the leading mental health trusts in the UK.
- On October 6, 2020, the Company announced that it issued 50,000 Common Shares at a price of \$0.285 per Common Share to a consultant for services provided to the Company.
- On October 6, 2020, the Company also announced that it granted 518,000 Stock Options to employees of the Company exercisable at a price of \$0.285 per Common Share for a period of 5 years from the date of the grant.
- On November 17, 2020, the Company announced that it entered into an agreement to deploy the ICA in clinical care with Sunderland GP Alliance, a leading federation of 35 primary care practices in the northeast of England.

- On December 1, 2020, the Company announced that it will be collaborating with researchers at Oxford University to investigate the use of the ICA in monitoring the cognition of individuals at risk of developing dementia.
- On December 22, 2020, the Company announced completion of an oversubscribed non-brokered private placement of 8,984,167 units at a price of \$0.30 per unit for gross proceeds of \$2,695,250. Each unit consisted of one Common Share and one-half common share purchase warrant. Each warrant entitles the holder to purchase an additional Common Share at a price of \$0.40 for a period of 24 months after closing.
- On January 12, 2021, the Company announced the expansion of the ADEPT Study to identify early-stage cognitive decline in people at risk of developing dementia. So far, participants in the study have been taking the ICA tests in person at NHS facilities. The project's expansion entails the delivery of iPads to participants' homes to enable them to take the ICA test, without travelling to hospital and putting themselves at risk of exposure to COVID-19.

## Subsequent to the Year Ended January 31, 2021 and to the date of this AIF

Subsequent to the 2020 fiscal year and to the date of this AIF, the Company had the following major product and operational achievements:

- On March 2, 2021, the Company entered an agreement with Dutch telehealth company Luscii Healthtech BV ("Luscii") regarding the deployment of OptiMind. Luscii is a provider of remote monitoring services for patients with conditions ranging from cancer and diabetes to Covid-19. It is the Dutch market leader, deployed in over half of hospitals in the Netherlands, and is now active in several other countries, including the UK. This success has been underpinned by innovation, both in its products and services and in its approach to employee welfare. As Luscii rolls out a major new wellness initiative within the business, it will deploy OptiMind to give better personal insights to team members and improve its understanding, via aggregate data, of the overall impact of its investment.
- On March 2, 2021, the Company also announced that it granted 80,000 stock options to employees of the Company exercisable at a price of \$0.84 per Common Share for a period of 5 years from the date of the grant.
- On March 23, 2021, the Company announced that it received a \$1.28 million loan facility from UK Innovates to support the Company in its product development and commercialization activities throughout the year. The loan itself allows draw-downs throughout 2021 in an initial availability period of 12 months, followed by a 24 month extension period where no repayment needs to be made, carrying a deferred interest rate of 3.7% per annum, followed by a 36 month repayment period.
- On March 23, 2021, the Company also announced that it entered into a consulting contract with Toronto-based marketing firm, North Equities Corp. ("NEC"). The contract has an associated fee of \$75,000, which has been paid by the issuance of 115,132 shares. NEC specializes in various social media platforms, and will be able to facilitate greater investor and consumer engagement and widespread dissemination of the Company's news.
- On May 4, 2021, the Company announced that it established a partnership with world-leading data and interoperability platform provider InterSystems. The partnership will facilitate the seamless integration of its cognitive assessment platform with electronic healthcare records ("EHRs") and enable the efficient adoption of the Company's technology in healthcare systems throughout the world. The Company's partnership

with InterSystems grants the Company access to InterSystems IRIS for Health™, a data platform specifically engineered to extract value from healthcare data. The platform will provide seamless interoperability between the ICA and EHRs, with full, built-in compliance with key data standards. The Company will also be able to take advantage of application development assistance, with access to partner channels and InterSystems' large network of healthcare systems in the UK, the US and beyond. This includes over 100 trusts and health boards in the UK and Ireland, and thousands of hospitals in the US.

- On June 8, 2021, the Company filed new patents covering the use its AI-based system to estimate levels of core biomarkers of neurodegeneration in the brain.
- On June 29, 2021, the Company opened its Dubai operations, covering the United Arab Emirates and the rest of the Middle East, enabling access to these lucrative and health technology friendly markets.
- On July 7 2021, the Company announced publication of the latest scientific paper on the ICA in the peer-reviewed academic journal Frontiers in Psychiatry, which provides further evidence of the validity of the ICA as a digital cognitive biomarker for detecting and monitoring patients with MCI and mild Alzheimer's and reaffirms the ICA's sensitivity in detecting cognitive impairment at the early stages of Alzheimer's.
- On July 14, 2021, the Company announced that the ICA will be part of a new NHS clinic dedicated to improving early-stage dementia diagnosis. The clinic will provide indepth subtyping of patients with MCI, followed by periodic, remote assessment of those who are expected to progress to Alzheimer's.
- On September 1, 2021, the Company announced that it has reached an agreement with the healthcare firm KetamineOne Capital Ltd ("**Ketamine One**") for the ICA to be deployed in Ketamine One's clinics across North America. Cognetivity and Ketamine One also entered into a non-binding letter of intent to collaborate on mental health assessments and plan on conducting clinical trials within Ketamine One's clinic network.
- On September 14, 2021, the Company announced that it has reached an agreement with a dementia and senor care provider, Loveday & Co for the deployment of the ICA.
- On September 22, 2021, the Company announced its first commercial agreement for the ICA to be deployed in clinical care in the Middle East. The ICA was deployed at the Clemenceau Medical Center.
- On October 5, 2021, the Company announced that it entered into an agreement with the Birmingham and Solihull Mental Health NHS Foundation Trust to deploy the ICA across both primary and secondary care.
- On October 13, 2021, the Company announced that it issued 117,500 Common Shares a deemed price of \$0.68 per common share to consultants of the Company for services provided and 1,550,000 options to directors, officers and consultants of the Company.
- On October 13, 2021, the Company also announced the resignations of Denise Lok as Chief Financial Officer and Corporate Secretary, Thomas Sawyer as Chief Operating Officer and Ravinder Kang as Director. Concurrently, the Company announced the appointments of Desmond Balakrishnan and Thomas Sawyer as Directors.
- On October 20, 2021, the Company announced that it received notification from the US Food and Drug Administration that its 510(k) submission for the ICA was reviewed and found to meet the requirements for a Class II Exempt Medical Device, allowing the Company to market the medical device for commercial distribution in the US.

# **Significant Acquisitions**

The Company has not completed any significant acquisitions during the most recently completed financial year.

#### **DESCRIPTION OF THE BUSINESS**

#### **General Overview**

Cognetivity is a technology company that has created a cognitive testing platform for use in medical, commercial and consumer environments. The ICA uses AI and machine learning techniques to help detect the earliest signs of impairment by testing the performance of large areas of the brain to support diagnosis of dementia. It has achieved regulatory approval for clinical use in the UK and Europe with future clinical approval anticipated in North America and elsewhere in the world.

Between 2000 and 2018, deaths in the US from heart disease fell by 7.8% while deaths from Alzheimer's increased by 146%.¹ Alzheimer's on its own is the sixth-largest cause of death in the US, killing more than breast, prostate and pancreatic cancer combined.² Further, dementias are the leading cause of death in the UK, accounting for 12.7% of deaths.³ Despite this, research shows that most people living with dementia have not received a formal diagnosis.⁴

The ICA flags the early signs of cognitive change due to the onset of neurodegeneration with greater sensitivity than the cognitive tests currently available to medical practitioners. With an increasing acceptance in the medical community of the vital role that early detection plays in the treatment of neurodegenerative disorders, a major challenge is the difficulty in detecting small cognitive changes, which currently require expensive expert monitoring and can involve a difficult, time-consuming and often subjective diagnosis process.

## **Summary of Products and Services**

# The Integrated Cognitive Assessment (ICA), currently being marketed as CognICA

The ICA is a unique approach to the detection of dementia that tests how the brain reacts to certain types of images. Simple and non-invasive, the ICA detects the earliest signs of disease before the onset of memory symptoms. It has the potential to transform treatment and care for millions of dementia sufferers around the globe, enabling earlier intervention to delay onset and reduce mortality.

In diagnosing the cognitive disease (e.g. Alzheimer's, dementia, etc.), researchers have tended to look for signs in either the whole brain or at the single-gene level. However, to detect the first disruptions to brain circuitry, techniques that probe the activity of thousands or millions of networked neurons are needed. An effective measurement of the performance of a large block of simultaneously activated neurons would provide the biggest clues to detect the steady cognitive decline that is symptomatic of the disease.<sup>5</sup> Consistent with this

<sup>&</sup>lt;sup>1</sup> <u>Alzheimer's Association, 2020.</u>

<sup>&</sup>lt;sup>2</sup> <u>US Department of Health & Human Services, 2020.</u>

<sup>&</sup>lt;sup>3</sup> <u>UK Office for National Statistics, 2018.</u>

<sup>&</sup>lt;sup>4</sup> <u>Alzheimer's Disease International, 2020.</u>

<sup>&</sup>lt;sup>5</sup> Kosik; Nature 503, November 2013, 31-32

approach, the ICA is designed to monitor the behaviour and performance of large collections of neurons, and so detect the disease in its early stages.

The ICA revolves around a visual experiment, engaging visual networks in the brain including the retina and visual cortex, as well as pattern recognition networks such as inferior temporooccipital areas. Participants also have a motor response (i.e. they make a physical response to categorize the presented images); therefore, the motor cortex is engaged as well.

Cognetivity's approach targets brain functionalities that are affected in the initial stages of the disease development, most importantly before the start of the memory symptoms that have to date been used to detect disease progression. These key brain functionalities include a subject's ability and speed in visual processing and classification. This is in contrast to current cognitive tests that attempt to detect memory deficits to diagnose cognitive impairment.

As opposed to other cognitive tests, the Company's diagnosis is not based on a battery of tests; instead we have a unique single test, in which participant's response reaction times are measured in a rapid categorization task. This is less time-consuming than running a battery of tests, so is therefore easier to administer and does not need expert intervention or supervision whilst maintaining high levels of sensitivity and accuracy in detection of both mild cognitive impairment ("MCI") and more advanced impairment.

The ICA also, importantly, utilises the power of AI to process the results from the test, allowing the detection of subtle patterns in the data that match particular sources of cognitive impairment, giving a likelihood of a subject belonging to a particular patient group (e.g. MCI or mild Alzheimer's). The AI engine is trained using real patient data from controlled studies and is capable of learning from larger data sets and improving its ability to diagnose over time, and adds increased sensitivity to MCI to the ICA.

What this means in practical terms is that the ICA is capable of being more sensitive to neurodegeneration than any current test, and with Cognetivity's AI engine processing the results it is anticipated that the test will be able to detect signature patterns in the responses that could indicate different causes of cognitive impairment; for example, between the effects of Alzheimer's, Parkinson's disease ("Parkinson's") and stroke.

The key to the approach is Cognetivity's technology platform - a "response-to-image" technique that measures minute changes in visual cognition, relying on multiple levels of brain processing and neural pathways. It aims to identify small changes in cognition in general practitioner triage environments, at a low cost per treatment and with high accuracy and repeatability. Additionally, the embedded AI algorithms in the ICA are designed to enable refined mapping of results and pattern detection in order to more clearly define and diagnose a spectrum of overlapping dementia-related disorders.

#### How the ICA Works

In the ICA test, a number of natural images are briefly shown to participants and they are asked to respond as quickly and accurately as possible to indicate whether they see an animal in an image sequence. The use of an animal image is particularly effective as a visual stimulus for simultaneously activating large numbers of neurons because the brain represents object images by response patterns that cluster according to various categories, the strongest of

which responses are between animate and inanimate stimuli. This has a clear evolutionary advantage, the ability to quickly discern between living and inanimate stimuli, and knowledge of this biological quirk of human brains drove Cognetivity's decision to use animate versus inanimate categorization at the heart of the test. Upon starting the ICA the participants are fed a range of short-duration images over the test period, which typically takes less than five minutes to complete the core test.

The images are selected from a library of categorized images to vary in terms of their complexity and their statistical properties. We collect participants' response reaction times and the accuracy of their categorization and then, using advanced machine learning and AI techniques, patients are assigned a probability that determines which category of condition they are more likely to belong (i.e. healthy or MCI). In our analysis, we use two measures: (i) participant's patterns of reaction times, and (ii) patterns of correlations between reaction times and the statistical properties of the presented images. All natural images have different statistical properties that can be quantified through the quantification of those properties which have meaning in terms of how the human brain processes images. For example, the complexity of an image is one of these properties; images that are more cluttered and contain more complicated visual cues that can be categorized as "surprising" to the eye are usually more complex and difficult to process.

The AI engine that carries out the analysis is trained by feeding it with the combination of two vectors: patterns of reaction times, and patterns of correlations between reaction times and image statistics. The AI classifier learns to distinguish between healthy and diseased participants based on these two patterns, which can then be used for diagnosis. As the system collects more validated data its ability to classify subjects is enhanced and it becomes more accurate. Two types of collected data can be used to train the engine: (i) having reaction times for more participants, which reduces the noise due to between-subject variations; and (ii) collecting more reaction time patterns per subject, which reduces the noise due to within-subject variations. Increasing the amount of each of these will increase the accuracy of the classifier (as a result of having more training data) and the specificity of the test.

In terms of technical architecture, the ICA test is configured with a client – server architecture, with data collection taking place on the client device (e.g. an iPad) which communicates with Cognetivity's secure servers. All processing is carried out on the server, using an AI engine to generate results, with analysis and output sent to the practice administrator to aid with diagnosis and provide documentation to append to the patient's healthcare records.

## **OptiMind**

OptiMind is the Company's Wellness app. OptiMind was created for easy use by consumers, that is nevertheless supported by the same medical-grade cognitive assessment functionality that powers the ICA. Geared towards the personalized tracking and management of cognitive performance, it is also designed to enable feedback loops between employees and employers for the monitoring of wellbeing and risk. OptiMind is also designed with enterprise scale in mind, being capable of serving the needs of millions of concurrent users around the world.

<sup>&</sup>lt;sup>6</sup> Alison J. Wiggett, Iwan C. Pritchard, Paul E. Downing, Animate and inanimate objects in human visual cortex: Evidence for task-independent

category effects, Neuropsychologia, Volume 47, Issue 14, December 2009, Pages 3111-3117.

#### Revenue

The Company's operations are in their early stages and the Company has not commenced generating revenue.

## **Specialized Skill and Knowledge**

The Company's employees have deeply rooted knowledge of the regional and global healthcare-related industries.

## **Competitive Conditions**

There are currently few companies with directly competing products, and nothing in terms of the combination of novel diagnostic technology (visual response test and AI as opposed to reappropriation of older test technology and portability (iPad as client device) that have also secured regulatory approval as a medical device. However, there are a number of assessment tools in the marketplace that offer IT based tools allowing diagnoses to varying degrees.

## **New Products**

Since February 18, 2020, when the Company announced it was developing OptiMind, the Company has not announced the introduction of any new products.

# **Intangible Properties**

The Company's most important intangible asset is its IP.

In September 2018, the Company received key patent application approvals from the European and United States Patent Offices against the ICA. In August 2019, the Company received similar patents from the CNIPA in China.

The Company also relies on trade secrets, know-how and continuing technological innovations to develop and maintain its competitive position. Cognetivity requires its employees, consultants and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment, consulting relationships or a collaboration. These agreements provide that all confidential information developed or made known during the course of these relationships are to be kept confidential. In the case of its employees, agreements are in place providing that all inventions resulting from work performed utilizing its property or relating to its business and conceived or completed by the individual during employment are Cognetivity's exclusive property to the extent permitted by law.

## **Economic Dependence**

The Company is not dependent on any third party for its route to market as it currently carries out its own commercialization activities and has not entered into any licensing or distribution agreement. Given that the product is software, there are some dependencies on cloud-based hosting using Amazon Web Services but these are mitigated by the fact that the server side software runs on standard operating systems and that these server configurations are replicable on other platforms. The client software currently runs on Apple iOS on both iPad and iPhone, but the Company is currently developing Android and web versions of the software in order to remove dependence on a single operating system and hardware supplier

for delivery of the platform.

## **Employees**

Not including the Officers and Directors, the Company has 17 full and part-time employees.

# **Foreign Operations**

The Company's head office is located at 2250 – 1055 West Hastings Street, Vancouver, British Columbia, Canada. However, the Company operates primarily from its office in the UK located at 3 Waterhouse Square, 138 Holborn, London EC1N 2SW, UK. The Company's principal operations and assets are also located in the UK.

#### **RISK FACTORS**

The following are certain factors relating to the Company's business which prospective investors should carefully consider before deciding whether to purchase Common Shares in the Company's authorized capital. The following information is a summary only of certain risk factors and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this AIF. These risks and uncertainties are not the only ones the Company is facing. Additional risk and uncertainties not presently known to Cognetivity, or that Cognetivity currently deems immaterial, may also impair the Company's operations. If any such risks actually occur, the business, financial condition, liquidity and results of the Company's operations could be materially adversely affected.

Cognetivity has limited operating history

The Company operates its business through Cognetivity UK, which was formed on April 10, 2013. The Company has incurred operating losses and cash flow deficits since inception. Cognetivity is therefore subject to many of the risks common to early-stage enterprises, including under-capitalization, cash shortages, and limitations with respect to personnel, financial, and other resources. There is no assurance that Cognetivity will be successful and the likelihood of success must be considered in light of its early stage of operations. The majority of Cognetivity's recent revenues were generated from a few customers. If economic or other factors were to change and thus impact these customers or the market, then the revenues of Cognetivity would be negatively impacted. To the extent Cognetivity has negative operating cash flow in future periods, it may need to allocate a portion of its cash reserves to fund such operating cash flow. Cognetivity may also be required to raise additional funds through the issuance of equity or debt securities. There can be no assurance that Cognetivity will be able to generate a positive cash flow from operations, that additional capital or other types of financing will be available when needed, or that these financings will on favourable terms.

Cognetivity may not be able to attract new customers or maintain its existing consumer base or grow or upgrade the products provided to these customers.

Cognetivity may have difficulty convincing prospective customers of the value of its products. Even if Cognetivity is successful in convincing prospective customers of the value of its products, they may not decide to use its products for a variety of reasons, some of which are out of Cognetivity's control. If organizations do not continue to adopt its products, Cognetivity's sales will not grow as quickly as anticipated, or at all, and Cognetivity's business, results of operations, and financial condition would be harmed.

In order for Cognetivity to maintain or improve its financial and operational results, it is important that Cognetivity's existing customers continue to use its products. Customer retention and expansion may decline or fluctuate as a result of a number of factors, including customers' satisfaction with its products, pricing, customers' spending levels, industry developments, competition and general economic conditions. If Cognetivity's efforts to maintain and expand its relationships with its existing customers are not successful, its business, results of operations, and financial condition may materially suffer.

Cognetivity may not be able to prevent damages resulting from a cybersecurity attack.

Cognetivity's business uses confidential information about employees and clients. Cognetivity is subject to cyberattacks, computer viruses, social engineering schemes and other means of unauthorized access to its systems. Cognetivity has not experienced any material losses to date related to cyber-attacks or other information security breaches, but there can be no assurance that Cognetivity will not incur such losses in the future. The security controls over sensitive or confidential information and other practices implemented by Cognetivity and its third-party vendors may not prevent the improper access to, disclosure of, or loss of such information. Failure to protect the integrity and security of such confidential and/or proprietary information could expose Cognetivity to fines, litigation, contractual liability, damage to its reputation and increased compliance costs. In addition, as cyber threats continue to evolve, Cognetivity may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Damage to Cognetivity's brand may harm its results.

Cognetivity's business depends on a strong reputation, and anything that harms its reputation will likely harm its results. Damage to Cognetivity's reputation can be the result of the actual or perceived occurrence of any number of events and could include any negative publicity, whether true or not. Although Cognetivity operates in a manner that is respectful to all stakeholders and that takes care in protecting its image and reputation, Cognetivity does not ultimately have direct control over how it is perceived by others. Reputational damage could negatively affect its ability to attract and retain employees, decreased shareholder confidence, increased challenges in maintaining relationships with prospective clients and other industry participants, and an impediment to its ability to execute its business plan, thereby having a material adverse impact on financial performance, financial condition, cash flows and growth prospects.

The business of Cognetivity is subject to broader economic factors.

Any adverse change in general economic conditions may adversely affect Cognetivity's business and financial condition. Significant declines in demand of any region or industry in which Cognetivity has a major presence may significantly decrease its revenues and profits. Deterioration in economic conditions or the financial or credit markets could also have an adverse impact on the ability of Cognetivity to collect payment for services. It is difficult for Cognetivity to forecast future demand for its services due to the inherent uncertainty in forecasting the direction and strength of economic cycles and the financial viability of its clients. When it is difficult for Cognetivity to accurately forecast future demand, Cognetivity may not be able to determine the optimal level of personnel and investment necessary to profitably take advantage of growth opportunities.

Cognetivity operates in a highly competitive industry and may be unable to retain clients or market share.

Cognetivity operates in a highly competitive business and may be unable to retain clients or market share. The health technology industry is highly competitive. There are many competitors, and new competitors are entering the market constantly. Current and new competitors may be better capitalized, have a stronger operating history, have more expertise and be able to provide comparable or superior services at the same or lower cost. There is no assurance that Cognetivity will be able to retain clients or its market share in the future, nor can there be any assurance that it will, in light of competitive pressures, be able to maintain or increase its current margins, or reach and sustain profitability.

Cognetivity's research and development efforts may not be successful.

Cognetivity believes that it must continue to dedicate a significant amount of resources to its research and development efforts to maintain and develop its technology and maintain and enhance its competitive position. Cognetivity recognizes the costs associated with these research and development investments earlier than the anticipated benefits, and the return on these investments may be lower, or may develop more slowly, than it expects. If Cognetivity spends significant resources on research & development and is unable to generate an adequate return on its investment, its business, financial condition and results of operations may be materially and adversely affected.

Cognetivity's business may suffer if it cannot continue to protect its intellectual property rights.

Cognetivity's revenue, cost of revenue, and expenses may suffer if Cognetivity cannot continue to protect its intellectual property rights, or if third parties assert that Cognetivity violates their intellectual property rights. Cognetivity relies upon patent, copyright, trademark and trade secret laws in the UK, the US, and similar laws in other countries, and agreements with employees, customers, suppliers and other parties, to establish and maintain intellectual property rights in its principal products, amongst other items. An unregistered trademark provides its owners with common law rights to prevent another party from representing its goods or services as that of another. The risk of Cognetivity using an unregistered trademark in a particular country is that such use risks infringing on the registered or unregistered trademark of another party. Such infringement may result in liability to Cognetivity and the loss of use of such trademark.

The industry in which Cognetivity competes may include new or existing entrants that own, or claim to own, intellectual property, and Cognetivity has received, and may receive in the future, assertions and claims from third parties that the Company's products infringe on their patents or other intellectual property rights. Litigation has been, and in the future may continue to be, necessary to determine the scope, enforceability and validity of third-party proprietary rights or to establish Cognetivity's proprietary rights. Any of Cognetivity's direct or indirect intellectual property rights could be challenged, invalidated or circumvented, or such intellectual property rights may not be sufficient to permit Cognetivity to take advantage of current market trends or otherwise to provide competitive advantages, which could result in costly or delayed product redesign efforts, discontinuance of certain product offerings, or other competitive harm. Further, the laws of certain countries do not protect proprietary rights to the same extent as the laws of the UK and US. Therefore, in certain jurisdictions,

Cognetivity may be unable to protect its proprietary technology adequately against unauthorized third-party copying or use, which could adversely affect its competitive position. Third parties also may claim that Cognetivity or customers or partners indemnified by Cognetivity are infringing upon their intellectual property rights. Even if management believes that the claims are without merit, the claims can be time-consuming and costly to defend, and divert management's attention and resources away from the business. Claims of intellectual property infringement also might require Cognetivity to redesign affected products, enter into costly settlement or license agreements (if such licenses can be obtained on commercially reasonable terms, or at all) or pay costly damage awards, or face a temporary or permanent injunction prohibiting the marketing or selling certain of its products, which could result in Cognetivity's business, operating results and financial condition being materially adversely affected.

Cognetivity may be unable to obtain patent or other proprietary or statutory protection for new or improved technologies or products.

Cognetivity's research and development activities and commercial success depend in part upon its ability to develop new or improved technologies and products, and to successfully obtain patent or other proprietary or statutory protection for these technologies and products in the UK, the US and other countries. Cognetivity seeks to patent concepts, components, protocols and other inventions that are considered to have commercial value or that will likely yield a technological advantage. Cognetivity owns rights to patented and patent pending technologies in the UK, the US, and other countries. Cognetivity may not be able to develop new technology that is patentable; new patents may not be issued in connection with Cognetivity's pending applications; allowed claims may not be sufficient to protect Cognetivity's new technology; and patents may not be obtained by Cognetivity in every jurisdiction where Cognetivity's products are sold or used. Furthermore, any patents issued could be challenged, invalidated or circumvented and may not provide proprietary protection or a competitive advantage. New entrants to the field may have been issued patents and may have filed patent applications or may obtain additional patents and proprietary rights for technologies similar to those that Cognetivity has made or may make in the future. Since patent applications filed before November 29, 2000 in the United States are maintained in secrecy until issued as patents, and since publication or public awareness of new technologies often lags behind actual discoveries, Cognetivity cannot be absolutely certain that it was the first to develop the technology covered by its pending patent applications or that it was the first to file patent applications for the technology. In addition, the disclosure in Cognetivity's new patent applications, particularly in respect of the utility of its claimed inventions, may not be sufficient to meet the statutory requirements for patentability in all cases. As a result, there can be no assurance that Cognetivity's new patent applications will result in enforceable patents, nor can the breadth of allowed claims in Cognetivity's patents, and their enforceability, be predicted. Even if Cognetivity's patents are held to be enforceable, others may be able to design around these patents or develop products similar to Cognetivity's products that are not within the scope of these patents.

Cognetivity faces fluctuating foreign exchange rates.

Cognetivity's reporting and functional currency is the Canadian dollar. However, a significant portion of operating expenses is denominated in British Pounds ("GBP") or US Dollars ("USD"). As a result, Cognetivity is exposed to fluctuations in the GBP and USD exchange rates for which it has not entered into foreign exchange hedges. Currency markets by their

nature are volatile and have seen increased volatility recently due to the COVID-19 pandemic. A significant appreciation of the Canadian dollar relative to the CBP and USD could materially impact the profitability of Cognetivity. In addition, Cognetivity will be exposed to greater foreign exchange risk from other countries as its operations, and its operating expenses, expand in foreign jurisdictions.

The price of the Common Shares may be volatile.

The price of the Common Shares may be volatile and subject to wide fluctuations as a result of a variety of factors, many of which are beyond Cognetivity's control including the following:

- actual or anticipated quarterly fluctuations in its operating results and financial condition;
- changes in financial estimates or publication of research reports and recommendations by financial analysts;
- reports in the press or investment community generally or relating to Cognetivity's reputation or the industry in which it operates;
- strategic actions by Cognetivity or its competitors, such as acquisitions, restructurings, dispositions, or financings;
- fluctuations in the stock price and operating results of Cognetivity's competitors;
- future sales of Cognetivity's equity or equity-related securities;
- proposed or adopted regulatory changes or developments;
- domestic and international economic factors unrelated to Cognetivity's performance;
   and
- general market conditions.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values, or prospects of such companies. Accordingly, the market price of the Common Shares may decline even if Cognetivity's operating results, underlying asset values or prospectus have not changed. There can be no assurance that continuing fluctuations in price and volume will not occur.

The market price of the Common Shares may decline due to the large number of convertible securities issued and outstanding Common Shares eligible for future sale.

Sales of substantial amounts of Common Shares in the public market, or the perception that these sales could occur, could cause the market price of Common Shares to decline. These sales could also make it more difficult for Cognetivity to sell equity or equity-related securities in the future at a time and price that it deems appropriate.

Cognetivity is reliant on key management

The success of Cognetivity is dependent upon the ability, expertise and judgment of its senior management. Shortages in qualified personnel or the loss of key personnel could adversely affect the financial condition of Cognetivity and results of operations of the business. The loss of any of Cognetivity's senior management or key employees could materially and adversely affect Cognetivity's ability to execute its business plan and strategy and Cognetivity may not be able to find adequate replacements on a timely basis, or at all.

Cognetivity may be subject to litigation.

Cognetivity may become party to litigation, either as plaintiff or defendant, from time to time

in the ordinary course of business including but not limited to actions related to Cognetivity's commercial relationships, employment matters, and services delivered. Such matters include both actual and threatened claims. Should any litigation in which Cognetivity becomes involved be determined against Cognetivity, such a decision could adversely affect Cognetivity's ability to continue operating, and the market price for the Common Shares. Even if Cognetivity is successful in litigation, litigation can redirect significant company resources.

Risks related to Cognetivity's foreign operations.

Cognetivity intends to continue to pursue and commit resources to growth opportunities globally which could result in international sales accounting for an increasing portion of Cognetivity's consolidated revenues. Cognetivity will be subject to a number of risks associated with international business activities that may increase liability or costs, lengthen sales and/or product development cycles, or require significant management attention. International operations carry certain risks and associated costs, such as: the complexities and expense of administering a business abroad; complications in compliance with, and unexpected changes in legal and regulatory restrictions or requirements; foreign laws, international import and export legislation; trading and investment policies; economic and political instability; foreign currency fluctuations; exchange controls; increased nationalism and protectionism; tariffs and other trade barriers; difficulties in collecting accounts receivable; potential adverse tax consequences; uncertainties of laws and enforcement relating to intellectual property and privacy rights; unauthorized copying of software; difficulty in managing a geographically dispersed workforce in compliance with diverse local laws and potential governmental expropriation (especially in undemocratic/authoritarian ruling parties); and other factors depending upon the country involved. There can be no assurance that Cognetivity will not experience these risks in the future. If foreign operations expand to the point where they account for a significant portion of Cognetivity's consolidated revenues, the presence of such risks could have a material adverse effect on Cognetivity's business, financial condition, and results of operations.

## Alignment of Cognetivity's cost structure with revenue

Cognetivity must ensure that its costs and workforce continue to be proportionate to demand for its services. Failure to align Cognetivity's cost structure and headcount with net revenue could adversely affect Cognetivity's business, financial condition, and results of operations. Cognetivity attempts to mitigate the risks of short-term revenue shifts by having a large portion of employee compensation based on the revenue of the employee's business unit, and for management to consolidate revenue and operating profit. Cognetivity is a growth company, and in order to facilitate growth, Cognetivity must continually invest in resources and overhead costs ahead of planned revenue. Accordingly, Cognetivity may operate with substantial negative cash flow in the future.

Lenders may penalize or otherwise take action against Cognetivity if it is unable to meet its obligations under financial instruments.

Cognetivity's ability to continue its operations is dependent upon the continued support of its shareholders, its ability to obtain additional financing as and when required and generating revenue. Currently, Cognetivity's revenues combined with its financing activities provide enough resources to fund its obligations as they come due.

There are risks inherent in Cognetivity's acquisition strategy.

Cognetivity may pursue accretive business acquisitions consistent with its investment strategy. Such acquisitions involve inherent risks including but not limited to: (a) unanticipated costs; (b) potential loss of key employees of the Company or the business acquired; (c) unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying the acquisition; and (d) decline in the value of the acquired business or assets. Further, there can be no assurance that an acquired business will achieve the desired levels of revenue, profitability or productivity or otherwise perform as expected. Any one or more of these factors could cause Cognetivity to fail to realize the anticipated benefits of the acquisition in question. Additionally, there can be no assurance that Cognetivity will be able to successfully identify suitable acquisition targets and complete acquisitions on terms beneficial to Cognetivity and its shareholders. Cognetivity's failure to successfully execute its acquisition strategy could have a material adverse effect on its business. Moreover, Cognetivity may be required to use available cash, incur debt, issue securities, or a combination of these in order to complete an acquisition. This could affect Cognetivity's future flexibility and ability to raise capital, operate or develop its business, and could dilute its existing shareholders' holdings, as well as decrease the trading price of the Common Shares. In addition, the process of acquiring and integrating companies into Cognetivity's existing business may also result in unforeseen difficulties which may absorb significant management attention, require significant financial resources, and be disruptive to operations causing the business and results of operations to suffer materially. There is no assurance that when evaluating a possible acquisition, Cognetivity will correctly identify and manage the risks and costs inherent in the business or asset to be acquired.

Directors and officers of Cognetivity may be subject to conflicts of interest.

Cognetivity is subject to various potential conflicts of interest because of the fact that some of its officers and directors are engaged in a range of business activities. In addition, Cognetivity's executive officers and directors may devote time to their outside business interests, so long as such activities do not materially or adversely interfere with their duties to Cognetivity. In some cases, Cognetivity's executive officers and directors may have fiduciary obligations associated with these business interests that interfere with their ability to devote time to Cognetivity's business and affairs and that could adversely affect Cognetivity's operations. These business interests could require significant time and attention of Cognetivity's executive officers and directors.

Cognetivity does not anticipate paying dividends on the Common Shares.

Cognetivity has not previously paid any dividends and does not anticipate paying any dividends in the foreseeable future. Dividends paid by Cognetivity would be subject to tax and, potentially, withholdings. Any decision to declare and pay dividends in the future will be made at the discretion of the Board and will depend on, among other things, financial results, cash requirements, contractual restrictions and other factors that the Board may deem relevant. As a result, investors may not receive any return on an investment in Common Shares, other than an appreciation in share price.

Cognetivity may not be able to obtain financing necessary to implement its business plan.

A component of Cognetivity's long-term strategy is to consolidate the fragmented cybersecurity industry. There is no guarantee that capital markets participants will support Cognetivity's business strategy, or that required capital will be available on acceptable terms or at all. Also, while a number of business owners have shown interest in joining Cognetivity,

there is no assurance that negotiations will result in completed acquisitions.

Management has discretion concerning unallocated funds

Management will have discretion concerning the use and allocation of Cognetivity's available funds as well as the timing of their expenditure. As a result, shareholders will be relying on the judgment of management for the application of the available funds. The results and the effectiveness of the application of the funds are uncertain. If Cognetivity's cash reserves are not applied effectively, Cognetivity's results of operations may suffer.

Disease outbreaks may negatively impact Cognetivity

A local, regional, national or international outbreak of a contagious disease, including the novel coronavirus COVID-19, Middle East Respiratory Syndrome, Severe Acute Respiratory Syndrome, H1N1 influenza virus, avian flu or any other similar illness, could cause staff shortages, supply shortages and increased government regulation, all of which may negatively impact the business, financial condition, and results of operations of Cognetivity. An epidemic, pandemic, outbreak or other public health crisis, such as COVID-19, could cause employees to avoid Cognetivity's offices, which could adversely affect Cognetivity's ability to adequately staff and manage its businesses. "Shelter-in-place" or other such orders by governmental entities could also disrupt Cognetivity's operations if employees, who cannot perform their responsibilities from home, are not able to report to work. The ultimate extent of the impact of any epidemic, pandemic or other health crisis on Cognetivity's business, financial condition, and results of operations will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of such epidemic, pandemic or other health crisis and actions taken to contain or prevent their further spread, among others. These and other potential impacts of an epidemic, pandemic or other health crisis, such as COVID-19, could therefore materially and adversely affect Cognetivity's business, financial condition, and results of operations.

Cognetivity may issue additional equity securities or engage in other transactions that could dilute its book value or affect the priority of the Common Shares, which may adversely affect the market price of Common Shares.

The Board may determine from time to time that it needs to raise additional capital by issuing additional Common Shares or other securities. Except as otherwise described in this AIF, Cognetivity will not be restricted from issuing additional Common Shares, including securities that are convertible into or exchangeable for, or that represent the right to receive, Common Shares. Because Cognetivity's decision to issue securities in any future offering will depend on market conditions and other factors beyond Cognetivity's control, it cannot predict or estimate the amount, timing, or nature of any future offerings, or the prices at which such offerings may be affected. Additional equity offerings may dilute the holdings of Cognetivity's existing shareholders or reduce the market price of the Common Shares, or both. Holders of Common Shares are not entitled to pre-emptive rights or other protections against dilution. New investors also may have rights, preferences and privileges that are senior to, and that adversely affect, Cognetivity's then-current holders of Common Shares. Additionally, if Cognetivity raises additional capital by making offerings of debt or preference shares, upon liquidation of Cognetivity, holders of its debt securities and preference shares, and lenders with respect to other borrowings, may receive distributions of its available assets before the holders of Common Shares.

Cognetivity is a holding company with its only material asset being direct or indirect ownership of Cognetivity UK.

Cognetivity is a holding company and essentially all of its assets are the capital stock Cognetivity UK. Consequently, Cognetivity's cash flows and ability to leverage future business opportunities are dependent on the earnings of its subsidiaries and the distribution of those earnings to Cognetivity. The ability of Cognetivity UK to pay dividends and other distributions will depend on their operating results and will be subject to applicable laws and regulations which require that solvency and capital standards be maintained by such companies and contractual restrictions contained in the instruments governing their debt, if any. In the event of a bankruptcy, liquidation or reorganization of any of its subsidiaries, holders of indebtedness and trade creditors will generally be entitled to payment of their claims from the assets of Cognetivity UK before any assets are made available for distribution to Cognetivity.

It may not be possible to effect service of process on some of Cognetivity's Directors and Officers

Cognetivity is incorporated under the laws of British Columbia, Canada; however, substantially all of its assets are located outside Canada. Furthermore, the majority of Cognetivity's Directors and Officers reside outside Canada. As a result, investors may not be able to effect service of process within Canada upon Cognetivity's Directors or Officers or enforce against them in Canadian courts judgments predicated on Canadian securities laws. Likewise, it may also be difficult for an investor to enforce in Canadian courts judgments obtained against these persons in courts located in jurisdictions outside Canada.

#### Income tax related risks.

Significant judgment is required in determining Cognetivity's provision for income taxes. Various internal and external factors may have favourable or unfavourable effects on Cognetivity's future provision for income taxes, income taxes payable and/or effective income tax rate. These factors include, but are not limited to: changes in tax laws, regulations and/or rates; results of audits by tax authorities; changing interpretations of existing tax laws or regulations; changes in estimates of prior years' items; future levels of R&D spending; changes in the overall mix of income among the different jurisdictions in which Cognetivity operates; and changes in overall levels of income before taxes. To the extent that the taxation authorities do not agree with Cognetivity's tax positions, Cognetivity may not be able to realize all or a portion of the tax benefits recognized. Furthermore, new accounting pronouncements or new interpretations of existing accounting pronouncements can have a material impact on Cognetivity's effective income tax rate. Cognetivity and its subsidiaries file income tax returns and pay income taxes in jurisdictions where Cognetivity believes it is subject to tax. In jurisdictions in which Cognetivity and its subsidiaries do not believe they are subject to tax and therefore do not file income tax returns, Cognetivity can provide no certainty that tax authorities in those jurisdictions will not subject one or more tax years (since inception of Cognetivity or its subsidiaries) to examination. Tax examinations are often complex as tax authorities may disagree with the treatment of items reported by Cognetivity, the result of which could have a material adverse effect on Cognetivity's financial condition and results of operations. In addition, in response to significant market volatility and disruptions to business operations resulting from COVID-19, legislatures and taxing authorities in many jurisdictions in which Cognetivity operate may propose changes to their tax rules. These changes could include modifications that have temporary effect, and more permanent changes. The impact of these potential new rules on Cognetivity, its long-term tax planning, and its tax effective tax rate could be material.

Cognetivity's business could be disrupted as a result of actions of certain shareholders or potential acquirers of Cognetivity.

If any of the holders of Common Shares commence a proxy contest, advocate for change that is not necessarily in the best interests of Cognetivity and all of its stakeholders, make public statements critical of the Cognetivity's performance or business, or engage in other similar activities, or if Cognetivity becomes subject to a potential acquisition target, then Cognetivity's business could be adversely affected because Cognetivity may have difficulty attracting and retaining employees and clients due to perceived uncertainties as to its future direction and negative public statements about its business. In addition, responding to proxy contests and other similar actions by shareholders is likely to result in Cognetivity incurring substantial additional costs and significantly diverting the attention of management and employees; and, if individuals are elected to the Board with a specific agenda, the execution of Cognetivity's strategic plan may be disrupted or a new strategic plan altogether may be implemented, which could have a material adverse impact on its business, financial condition or results of operations. Further, any of these matters or any such actions by shareholders may impact and result in volatility of the price of the Common Shares.

Cognetivity's reliance on copyrights, trademarks, trade secrets, confidentiality procedures and similar contractual provisions.

In addition to patents, Cognetivity relies on, among other things, copyrights, trademarks, trade secrets, confidentiality procedures and contractual provisions to protect its proprietary rights in the UK, the US and other countries. As a result, it is possible that the following may occur: some or all of the confidentiality agreements entered into by Cognetivity with its employee, consultants, business partners, customers, potential customers and other third parties will not be honoured; third parties will independently develop equivalent technology or misappropriate Cognetivity's technology and/or designs; disputes will arise with Cognetivity's strategic partners, customers or others concerning the ownership of intellectual property; there may occur an unauthorized disclosure of source code, know-how or trade secrets; or contractual provisions may not be enforced in foreign jurisdictions. There can be no assurance that Cognetivity will be successful in protecting its proprietary rights in Canada, the United States, and other countries.

## **DIVIDENDS AND DISTRIBUTIONS**

The Company has not paid dividends or made distributions on its Common Shares since incorporation. The Company has no present intention of paying dividends in the near future. It will pay dividends when, as and if declared by the Board. The Company expects to pay dividends only out of retained earnings in the event that it does not require its retained earnings for operations and reserves. There are no restrictions in the Company's articles of incorporation or bylaws that prevent it from declaring dividends. The Company has no shares with preferential dividend and distribution rights authorized or outstanding.

## **DESCRIPTION OF CAPITAL STRUCTURE**

Cognetivity is authorized to issue an unlimited number of Common Shares and an unlimited number of Class B Shares without nominal or par value of which. As of the date hereof,

76,332,771 Common Shares are issued and outstanding.

#### **Common Shares**

Holders of Common Shares are entitled to receive notice of, and to attend and vote at, all meetings of the shareholders of Cognetivity, and each Common Share confers the right to one vote, provided that the shareholder is a holder on the applicable record date declared by the Board. The holders of Common Shares, subject to the prior rights, if any, of any other class of shares of Cognetivity, are entitled to receive such dividends in any financial year as the Board may determine. In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of the Common Shares are entitled to receive, subject to the prior rights, if any, of the holders of any other class of shares of Cognetivity, the remaining property and assets of Cognetivity. The Common Shares are not subject to call or assessment rights, redemption rights, rights regarding purchase for cancellation or surrender, or any pre-emptive or conversion rights.

## **Class B Shares**

The holders of the Class B Shares are not entitled to receive notice of and to attend any meeting of the shareholders of Cognetivity or to vote on any matter at any meetings of shareholders of Cognetivity. The holders of Class B Shares are not entitled to receive dividends. The holders of the Class B Shares shall be entitled, in the event of any liquidation, dissolution or winding up, whether voluntary or involuntary, or any other distribution of assets among the Company's shareholders for the purpose of winding up its affairs, to share rateably, together with the holders of Common Shares in such assets of Cognetivity as are available for distribution.

In May 2020, each Class B Shares automatically converted into one Common Share, without payment of additional consideration, upon the ICA being approved for CE Marking.

All Class B Shares are not subject to any pre-emptive rights, retraction or surrender provisions, sinking or purchase fund provisions, provisions permitting or restricting the issuance of additional securities or provisions requiring a shareholder to contribute additional capital. The Class B Shares shall not be subdivided, consolidated, reclassified or otherwise changed unless contemporaneously therewith the Common Shares are adjusted proportionately.

## **MARKET FOR SECURITIES**

## **Trading Price and Volume**

The table below summarizes the range and volume of trading prices for the last 12 months:

	CSE Pric	-	
Month	High	Low	Total Volume
November 2020	\$0.39	\$0.29	1,115,079

-	CSE Price Range		_
Month	High	Low	Total Volume
December 2020	\$0.64	\$0.31	2,685,555
January 2021	\$0.67	\$0.52	1,741,722
February 2021	\$0.90	\$0.56	4,932,757
March 2021	\$0.86	\$0.54	3,419,168
April 2021	\$0.68	\$0.48	3,057,284
May 2021	\$0.79	\$0.63	2,326,257
June 2021	\$1.35	\$0.68	5,813,702
July 2021	\$1.12	\$0.79	1,437,002
August 2021	\$0.88	\$0.65	1,152,121
September 2021	\$0.80	\$0.54	2,272,496
October 2021	\$0.80	\$0.58	1,784,433

# **Prior Sales**

During the financial year ended January 31, 2021, the Company issued the following Common Shares or securities exercisable into Common Shares:

Date of Issue	Description	Number of Securities	Price per Security/ Exercise Price
February 14, 2020	Common Shares	405,952 <sup>(1)</sup>	\$0.21
February 14, 2020	Options	100,000 (2)	\$0.21
May 4, 2020	Common Shares	315,616 (1)	\$0.1785
May 8, 2020	Common Shares	10,000,002 <sup>(3)</sup>	\$0.13
May 8, 2020	Restricted Share Units	332,000 <sup>(4)</sup>	N/A
October 5, 2020	Common Shares	287,500 <sup>(5)</sup>	\$0.25
October 5, 2020	Common Shares	50,000 <sup>(6)</sup>	\$0.285

October 5, 2020	Options	518,000 <sup>(2)</sup>	\$0.285
October 9, 2020	Common Shares	187,500 <sup>(5)</sup>	\$0.25
October 14, 2020	Common Shares	148,600 <sup>(5)</sup>	\$0.25
October 19, 2020	Common Shares	7,700 <sup>(5)</sup>	\$0.25
October 29, 2020	Common Shares	140,000 <sup>(5)</sup>	\$0.25
December 22, 2020	Common Shares	8,984,167 <sup>(7)</sup>	\$0.30
December 22, 2020	Warrants	4,492,084 <sup>(7)</sup>	\$0.40
December 22, 2020	Finder's Warrants	557,725 <sup>(7)</sup>	\$0.40
January 4, 2021	Common Shares	180,000 <sup>(5)</sup>	\$0.25
January 6, 2021	Common Shares	100,000 (8)	\$0.145
January 14, 2021	Common Shares	214,813 <sup>(9)</sup>	\$0.26
January 14, 2021	Warrants	214,813 <sup>(9)</sup>	\$0.30

# Notes:

- (1) Issued pursuant to a debt settlement.
- (2) Issued pursuant to a grant of options to employee(s) of the Company.
- (3) Issued pursuant to the Conversion of Class B Shares.
- (4) Issued pursuant to a restricted shares agreement.
- (5) Issued pursuant to the exercise of warrants.
- (6) Issued to a consultant of the Company.
- (7) Issued pursuant to a private placement of units closed on December 22, 2020.
- (8) Issued pursuant to an exercise of options.
- (9) Issued pursuant to a conversion of a convertible loan.

Subsequent to the financial year ended January 31, 2021, the Company issued the following Common Shares or securities exercisable into Common Shares:

Date of Issue	Description	Number of Securities	Price per Security/ Exercise Price
February 3, 2021	Common Shares	138,889 (1)	\$0.25
February 17, 2021	Common Shares	50,000 <sup>(2)</sup>	\$0.43
March 1, 2021	Options	80,000 (3)	\$0.84
March 1, 2021	Common Shares	50,000 <sup>(2)</sup>	\$0.25
March 9, 2021	Common Shares	9,000 <sup>(2)</sup>	\$0.25

March 24, 2021	Common Shares	115,132 <sup>(3)</sup>	\$0.65
April 30, 2021	Common Shares	125,000 (1)	\$0.40
May 3, 2021	Common Shares	12,057 <sup>(1)</sup>	\$0.40
June 10, 2021	Common Shares	75,000 <sup>(1)</sup>	\$0.40
June 11, 2021	Common Shares	200,000 <sup>(2)</sup>	\$0.25
June 16, 2021	Common Shares	200,000(1)	\$0.30
June 17, 2021	Common Shares	10,460 <sup>(1)</sup>	\$0.25
June 22, 2021	Common Shares	20,000(1)	\$0.40
July 19, 2021	Common Shares	10,000(1)	\$0.40
August 9, 2021	Common Shares	526,064 <sup>(5)</sup>	\$0.26
August 9, 2021	Warrants	526,064 <sup>(5)</sup>	\$0.30
August 16, 2021	Common Shares	526,064 <sup>(1)</sup>	\$0.30
August 31, 2021	Common Shares	1,457,449 <sup>(5)</sup>	\$0.13
August 31, 2021	Warrants	1,457,449 <sup>(5)</sup>	\$0.15
September 7, 2021	Common Shares	60,000 <sup>(1)</sup>	\$0.40
September 27, 2021	Common Shares	1,457,449 <sup>(1)</sup>	\$0.15
October 8, 2021	Common Shares	117,500 <sup>(4)</sup>	\$0.68
October 12, 2021	Options	450,000 <sup>(4)</sup>	\$0.67
October 12, 2021	Options	1,100,000(3)	\$0.67
October 12, 2021	Restricted Share Units	250,000 <sup>(4)</sup>	N/A
October 12, 2021	Restricted Share Units	3,250,000 <sup>(6)</sup>	N/A
October 14, 2021	Common Shares	200,000 <sup>(2)</sup>	\$0.25
October 18, 2021	Common Shares	150,000 <sup>(2)</sup>	\$0.25
October 21, 2021	Common Shares	40,000(1)	\$0.40

#### Notes:

- (1) Issued pursuant to the exercise of warrants.
- (2) Issued pursuant to an exercise of options.
- (3) Issued pursuant to a grant of options to employee(s) of the Company.
- (4) Issued to a consultant of the Company.
- (5) Issued pursuant to a conversion of a convertible loan.
- (6) Issued pursuant to a grant of restricted share unites to employee(s) of the Company.

## **DIRECTORS AND OFFICERS**

# Name, Occupation and Security Holding

## **Directors and Officers**

The Directors and Officers of the Company are set out below. The Directors are elected by the shareholders at each annual meeting of shareholders and typically hold office until the next annual meeting of shareholders, at which time they may be re-elected or replaced.

The only committee of the Board is the Audit Committee.

Name of Nominee; Current Position with the Company and Province and Country of Residence	Period as a Director of the Company	Present Principal Occupation	Common Shares Beneficially Owned or Controlled <sup>(1)</sup>
Sina Habibi <sup>(2)</sup>	Since	Director and Chief Executive	5,330,769
Chief Executive Officer and Director	December 21, 2017	Officer of Cognetivity UK. Since April 2013; and PhD and postdoctoral researcher	(7.0%)
London, United Kingdom		at the University of Cambridge from October 2008 to April 2014.	
Seyed Madhi Khaligh Razavi <sup>(3)</sup>	Since	Postdoctoral researcher at MIT since 2014; and PhD	4,134,066
Chief Scientific Officer	December 21, 2017	student at Cambridge from	(5.4%)
Massachusetts, USA		2012 to 2014.	

Name of Nominee; Current Position with the Company and Province and Country of Residence	Period as a Director of the Company	Present Principal Occupation	Common Shares Beneficially Owned or Controlled <sup>(1)</sup>
Thomas Sawyer <sup>(9)</sup> Chief Financial Officer, Chief Operating Officer and Director London, United Kingdom	Chief Financial Officer since October 12, 2021, Chief Operating Officer since December 21, 2017; Director since October 13, 2021.	Director of Advanced Weather Applications; Weather Unlocked from 2014 to present and Chief Operating Officer of Cantabio Pharmaceuticals from 2016 to present; and Director of Capro UK from 2014 to present	435,165 (0.6%)
Mark A. Phillips <sup>(5)(8)</sup> Chief Compliance Officer and Director London, United Kingdom	Since December 21, 2017	Chairman of Cognetivity UK. Since 2014; Director of Fluorogenics Limited from September 2016 to present; and Director of LabZero Limited from December 2013 to present.	543,956 (0.7%)
Christos Kalafatis <sup>(6)</sup> Chief Medical Officer and Director London, United Kingdom	Since December 21, 2017	Consultant in Old Age Psychiatry since 2015; Registrar in Old Age Psychiatry from 2012 to 2015.	435,165 (0.6%)
David Velisek <sup>(3)(4)(5)</sup> Director British Columbia, Canada	Since December 11, 2015	Manager, Corporate Development at Baron Global Financial Canada Ltd from 2009 to present.	100,000 (0.1%)
Desmond Balakrishnan <sup>(5)</sup> Director British Columbia, Canada	Since October 12, 2021	Partner at McMillan LLP from 2004 to present.	Nil

# Notes:

- (1) Based on 76,332,771 issued and outstanding Common Shares.
- (2) Mr. Habibi also holds Options to purchase 1,000,000 Common Shares at an exercise price of \$0.25, expiring March 19, 2023.
- (3) Mr. Khaligh Razavi also holds Options to purchase 500,000 Common Shares at an exercise price of \$0.25, expiring on March 19, 2023 and Options to purchase 50,000 Common Shares at an exercise price of \$0.67, expiring on October 12, 2026.
- (4) Mr. Velisek also holds Options to purchase 200,000 Common Shares at an exercise price of \$0.25, expiring on March 19, 2023 and Options to purchase 100,000 Common Shares at an exercise price of \$0.67, expiring on October 12, 2026.

- (5) Member of Audit Committee.
- (6) Mr. Kalafatis also holds Options to purchase 300,000 Common Shares at an exercise price of \$0.25, expiring March 19, 2023 and Options to purchase 350,000 Common Shares at an exercise price of \$0.67, expiring on October 12, 2026.
- (7) Mr. Phillips also holds Options to purchase 300,000 Common Shares at an exercise price of \$0.25, expiring on March 19, 2023 and Options to purchase 250,000 Common Shares at an exercise price of \$0.67, expiring on October 12, 2026.
- (8) Mr. Sawyer also holds Options to purchase 300,000 Common Shares at an exercise price pf \$0.25, expiring on March 19, 2023 and Options to purchase 350,000 Common Shares at an exercise price of \$0.67, expiring on October 12, 2026.

The following are brief biographies of the above individuals:

# Sina Habibi, Chief Executive Officer and Director

Dr. Habibi has been the Chief Executive Officer the Chief Executive Officer of the Company since April 2013. He has worked as an executive director in medical-technology, gaming (Neural Game Studios), researcher in nano-technology (Cavendish Laboratory, University of Cambridge in Collaboration with GSK) and synthetic biology (Institute for Manufacturing), product manager in car manufacturing (Peugeot) and technology consultant in the laser industry (National Physical Laboratories).

Through his academic path Dr. Habibi has become proficient in numerical and statistical data collection and analysis, stochastic modeling and programming, and currently consulting PriNumb (Digital Wallet Company) and UnIP (Parking Optimisation solution) as big data and technology consultant. Dr. Habibi was an active member of Cambridge University Entrepreneurs since 2010 and chaired the society in 2013-2014.

Dr. Habibi obtained his PhD in Engineering from the University of Cambridge.

## Seyed Madhi Khaligh Razavi, Chief Scientific Officer

Dr. Khaligh-Razavi is one the co-founders at Cognetivity UK. He is a neuroscientist and currently carrying out research at the Computer Science and Artificial Intelligence Laboratory (CSAIL) at Massachusetts Institute of Technology (MIT), studying the human brain using multimodal neuroimaging techniques and modelling its functions using machine learning and AI techniques.

With a background in computer science and machine learning, he completed his PhD at the MRC Cognition and Brain Sciences Unit, Cambridge University, studying visual object recognition in human and machine systems. He is also currently affiliated with Harvard Catalyst (The Harvard University Clinical and Translational Science Centre), where he has worked on medical device development.

Dr. Khaligh-Razavi is an employee of the Company and has entered into a non-competition or confidentiality agreement with the Company. It is expected that he will devote 40% of his time to the business of the Company to effectively fulfill his duties as the Chief Scientific Officer of the Company.

# Thomas Sawyer, Chief Financial Officer and Director

Dr. Sawyer has been the Chief Operations Officer of CGN since April 2016. He combines a background in academic research with 13 years of experience in entrepreneurship, consulting and private equity investment in sectors including biotechnology, information technology, logistics and natural resources across the globe. He has worked on merger and acquisition

activities for private and public companies in the United States, Europe and Africa and has experience in raising capital, initial public offerings, mergers and in Chief Executive Officer / Chief Technology Officer roles for start-up and private equity backed ventures, since 2015 as a Director in the area of biotechnology developing therapies for a United States listed pharmaceutical company working on disease modifying therapies for Alzheimer's and Parkinson's.

Dr. Sawyer holds a PhD in Life Sciences from the University of Glasgow, an Executive MBA from the University of Cambridge and has lectured on Finance at the University of Cambridge, Exeter University and University College London. Dr. Sawyer combines a strong technical background with business development, corporate finance and operations, and is an active mentor on the "Accelerate Cambridge" business accelerator program at the University of Cambridge.

Dr. Sawyer is not a party to any employment, non-competition or confidentiality agreement with the Company. It is expected that he will devote 40% of his time to the business of the Company to effectively fulfill his duties as the Chief Operating Officer of the Company.

# Mark A. Phillips, Chief Compliance Officer and Director

Dr. Phillips has over 30 years' experience in the pharmaceutical and lifescience industries, covering product development, manufacturing operations and business strategy. Dr. Phillips has previously held positions as Senior Vice President and Head of Diagnostic Development and Supply, and Senior Vice President in R&D at GlaxoSmithKline, and is currently a part-time Non-Executive Director of a non-competing life-science start-up (Fluorogenics). Dr. Phillips has a degree in Chemical Engineering from Loughborough University, a Masters and PhD in Engineering from the University of Cambridge, and is a Chartered Engineer and Fellow of Institution of Chemical Engineers. Dr. Phillips occasionally teaches at Leeds University Business School, Cranfield University and Cambridge University.

## Christos Kalafatis, Chief Medical Officer and Director

Dr. Kalafatis is an Old Age Psychiatrist with a special interest in medical innovation, service development and digital health quality improvement. Dr. Kalafatis has developed electronic clinics for older people and led strategic national health system (NHS) partnership schemes in dementia and has worked across different NHS trusts to modernise the practice and scope of Memory Services.

Dr. Kalafatis is currently working as consultant in the dementia & Ageing Clinical Academic Group, SLAM NHS Trust and has partnered with King's College London for the development of novel digital health interventions in older adults.

## David Velisek, Director

Mr. Velisek is currently employed with Baron Global Financial Canada Ltd. as Manager, Corporate Development. Mr. Velisek has been involved in capital markets for over 25 years in investor relations, as a trader of equities, options and futures as well as an investment advisor. Mr. Velisek obtained financial experience through his years of analyzing financial statements and performance measurement ratios during his years as an investment advisor.

## Desmond Balakrishnan, Director

Mr. Balakrishnan is a lawyer practicing in the areas of Corporate Finance and Securities, Mergers and Acquisitions, Lending, Private Equity, Cannabis, Gaming, Entertainment and Regulated Industries, for McMillan LLP, where he has been a partner since 2004. Mr. Balakrishnan also serves as a director, officer or general counsel of several resource, finance and gaming firms, including Northern Dynasty Minerals Ltd. (NDM-TSX, NAK-NYSE) and Great Canadian Gaming Corp. (GC-TSX). Mr. Balakrishnan holds a Bachelor of Arts and Certified Liberal Arts degree from Simon Fraser University (June 1994, October 1994) and a Bachelor of Laws (with Distinction) from the University of Alberta (May 1997).

# **Security Holding**

As of the date hereof, the Directors and executive officers of the Company collectively owned or controlled 10,979,121 Common Shares, representing approximately 14% of the Company's outstanding Common Shares as of the date of the AIF.

## **Cease Trade Orders, Bankruptcies, Penalties and Sanctions**

Other than as described below, none of our Directors or executive officers has, within the 10 years prior to the date of this AIF, been a director, chief executive officer, or chief financial officer of any company (including us) that, while such person was acting in that capacity (or after such person ceased to act in that capacity but resulting from an event that occurred while that person was acting in such capacity), was the subject of a cease trade order, an order similar to a cease trade order, or an order that denied the company access to any exemption under securities legislation, in each case for a period of more than 30 consecutive days.

Desmond Balakrishnan, a director of the Company, was a director of Aroway Energy Inc. ("**Aroway**") a TSX Venture Exchange listed company at the time a cease trade order was issued by the British Columbia Securities Commission on January 4, 2016 for not having filed its annual financial statements for the year ended June 30, 2015 and its interim financial report for the financial period ended September 30, 2015 and its management's discussion and analysis for the periods ended June 30, 2015 and September 30, 2015. The cease trade order remains in effect.

Desmond Balakrishnan, a director of the Company, was a director of Probe Resources Ltd. ("**Probe**") (now known as Rooster Energy Ltd.), a TSX Venture Exchange listed company, at the time Probe was issued a cease trade order on January 7, 2011, for failure to file its annual financial statements and management's discussion and analysis for its financial year ended August 31, 2010 in the required time. Probe announced by press release dated November 16, 2010 that the company's U.S. subsidiaries filed voluntary Chapter 11 petitions in U.S. Bankruptcy Court for the Southern District of Texas in Houston, Texas. Mr. Balakrishnan resigned upon the filing of the Chapter 11 proceeding in November 2010. Probe emerged from its Chapter 11 bankruptcy filing on April 15, 2011 and then brought its filings up to date. On February 6, 2012, the cease trade order was lifted.

None of our Directors or executive officers or, to our knowledge, shareholders holding a sufficient number of securities to materially affect control of Cognetivity has within the 10 years prior to the date of this AIF: (i) become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or comprise with creditors or had a receiver, receiver manager or trustee

appointed to hold its assets; or (ii) been a director or executive officer of any company, that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or comprise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

None of our Directors or executive officers or, to our knowledge, shareholders holding a sufficient number of securities to materially affect control of Cognetivity has: (i) been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor making an investment decision.

## **Conflicts of Interest**

The Company is not aware of any existing or potential material conflicts of interest between the Company or a subsidiary of the Company and any Director or officer of the Company or of a subsidiary of the Company.

#### **AUDIT COMMITTEE**

#### **Audit Committee Charter**

The Audit Committee's Charter is attached to this AIF as **Schedule "A".** 

## **Composition of the Audit Committee**

As of the date of this AIF, the Audit Committee is composed of, David Velisek, Mark Phillips and Desmond Balakrishnan and. Mr. Velisek is independent as such term is defined in National Instrument 52-110 – Audit Committees ("NI 51-110"). Mr. Phillips is not independent as he is currently the Chief Compliance Officer of the Company. Mr. Balakrishnan is not independent as he is currently a partner in a law firm that provides legal services to the Company. In accordance with section 6.1.1(3) NI 52-110 relating to the composition of the audit committee for venture issuers, a majority of the members of the Audit Committee are not executive officers, employees or control persons of the Company. Each of Mr. Phillip, Mr. Velisek and Mr. Balakrishnan are financially literate as such term is defined in NI 52-110.

## **Relevant Education and Experience**

See "Directors and Officers" above for a description of the education and experience of each Audit Committee member that is relevant to the performance of his/her responsibilities as an Audit Committee member.

## **Audit Committee Oversight**

During F2020, all recommendations of the Audit Committee with respect to nomination or compensation of the Company's external auditor were adopted by the Board.

# **Pre-Approval Policies and Procedures**

During F2020, the Audit Committee pre-approved a number of specific non-audit services, namely, tax advisory services.

#### **External Auditor Service Fees**

Fees billed or to be billed by the Company's external auditor for the fiscal year ended January 31, 2021 and for the year ended January 31, 2020 were as follows:

Financial Period Ending	Audit Fees (\$) <sup>(1)</sup>	Audit Related Fees (\$) <sup>(2)</sup>	Tax Fees (\$) <sup>(3)</sup>	All Other Fees (\$)
2021	\$43,870	Nil	\$1,200	Nil
2020	\$51,681	Nil	\$1,260	Nil

#### Note:

- (1) "Audit Fees" include fees necessary to perform the annual audit of the Company's consolidated financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of security filings, and statutory audits and quarterly reviews.
- (2) "Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include quarterly financial statement reviews, employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews, and audit or attest services not required by legislation or regulation.
- (3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning, and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.

#### **PROMOTERS**

Sina Habibi, the Chief Executive Officer and a director of the Company, may be considered a promoter of the Company, and Seyed-Mahdi Khaligh-Razavi, the CSO of the Company, may be considered a promoter of the Company, in connection with their respective to their initiatives in founding and organizing the Company's business and affairs.

David Velisek, a director of the Company, may be considered a promoter of the Company, and Denise Lok, a former Chief Financial Officer and Corporate Secretary of the Company, may be considered a promoter of the Company, in connection with their respective roles in capitalizing the Company, the financing of the Company acquisition of Cognetivity UK and the ongoing operations of the Company going forward.

For a description of the voting and equity securities of the Company held by the promoters see "Directors and Officers" and for a description of all compensation received or expected to be received by the promoters see the Form 51-102F6V - Statement of Executive Compensation filed under the Company's SEDAR profile at <a href="https://www.sedar.com">www.sedar.com</a>.

## **LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

# **Legal Proceedings**

The Company is not aware of any existing or contemplated legal proceedings that it is or was a party to, or that any of its property is or was the subject of, during F2020 that involves a claim for damages which, exclusive of interest and costs, would exceed 10% of the current assets of the Company.

## **Regulatory Actions**

There were no: (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during its most recently completed fiscal year; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision; or (c) settlement agreements that the Company entered into before a court relating to securities legislation or with a securities regulatory authority during its most recently completed financial year.

## INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

The Company is not aware of any material interest, direct or indirect, of: (i) a Director or executive officer of the Company, (ii) a person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the Common Shares of the Company, or (iii) any associate or affiliate of any of the foregoing, in any transaction within the three most recently completed fiscal years or during the current fiscal year, that has materially affected or is reasonably expected to materially affect the Company.

#### TRANSFER AGENTS AND REGISTRARS

The registrar and transfer agent for the Company's Common Shares is TSX Trust Company of Canada at its offices in Toronto, Ontario.

#### MATERIAL CONTRACTS

The Company is not party to any material contract (as such term is defined in National Instrument 51-102 – *Continuous Disclosure Obligations*) entered during the year ended January 31, 2021 or the date hereof or previously that is still in effect.

#### INTERESTS OF EXPERTS

# **Names of Experts**

MNP LLP reported on the Company's audited consolidated financial statements for the years ended January 31, 2020 and 2019, which are filed on SEDAR.

## **Interests of Experts**

MNP LLP is the external auditor for the Company and have confirmed that they are independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Institute of Chartered Professional Accountants of British Columbia.

## **ADDITIONAL INFORMATION**

Additional information relating to the Company is available under the Company's profile on SEDAR at www.sedar.com.

Additional information, including additional information with respect to the Directors and officers of the Company and their remuneration and indebtedness, options to purchase securities, interests in material transactions, and securities authorized for issuance under equity compensation plans (as applicable) is and will be contained in the Company's management information circulars for its prior and upcoming annual general meetings, which are and will be available under the Company's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

Additional financial information, including information with respect to risks and uncertainties, is provided in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended January 31, 2021. Copies of the financial statements and Management's Discussion and Analysis are available under the Company's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

# **SCHEDULE "A"**

#### **COGNETIVITY SECURITY INC.**

## **AUDIT COMMITTEE CHARTER**

## I. Purpose

The main objective of the Audit Committee is to act as a liaison between the Board and the Company's independent auditors (the "**Auditors**") and to assist the Board in fulfilling its oversight responsibilities with respect to the financial statements and other financial information provided by the Company to its shareholders and others.

## II. Organization

The Committee shall consist of three or more Directors and shall satisfy the laws governing the Company and the independence, financial literacy, expertise and experience requirements under applicable securities law, stock exchange requests and any other regulatory requirements applicable to the Audit Committee of the Company.

The members of the Committee and the Chair of the Committee shall be appointed by the Board. A majority of the members of the Committee shall constitute a quorum. A majority of the members of the Committee shall be empowered to act on behalf of the Committee. Matters decided by the Committee shall be decided by majority votes.

Any member of the Committee may be removed or replaced at any time by the Board and shall cease to be a member of the Committee as soon as such member ceases to be a Director.

The Committee may form and delegate authority to subcommittees when appropriate.

## III. Meetings

The Committee shall meet as frequently as circumstances require.

The Committee may invite, from time to time, such persons as it may see fit to attend its meetings and to take part in discussion and consideration of the affairs of the Committee.

The Company's accounting and financial officer(s) and the Auditors shall attend any meeting when requested to do so by the Chair of the Committee.

## IV. Responsibilities

- 1) The Committee shall recommend to the Board:
  - a) the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company; and
  - b) the compensation of the external auditor.
- 2) The Committee shall be directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the

- resolution of disagreements between management and the external auditor regarding financial reporting.
- 3) The Committee must pre-approve all non-audit services to be provided to the Company or its subsidiary entities by the Company's external auditor.
- 4) The Committee must review the Company's financial statements, MD&A and annual and interim earnings press releases before the Company publicly discloses this information.
- 5) The Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements, other than the public disclosure referred to in subsection (4), and must periodically assess the adequacy of those procedures.
- 6) The Committee must establish procedures for:
  - a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
  - b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.
- 7) An audit committee must review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the issuer.

# V. Authority

The Committee shall have the following authority:

- a) to engage independent counsel and other advisors as it determines necessary to carry out its duties,
- b) to set and pay the compensation for any advisors employed by the Committee, and
- c) to communicate directly with the external auditors.