



# United Scientists Association of Technology Inc. White Paper

## A Non-Profit Association

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## Table of Contents

DISCLAIMER	3
THE ICO	5
ROADMAP	8
CROWDFUNDING AND HOW TO PARTICIPATE	9
ICO MECHANISM	10
USAT TOKEN DISTRIBUTION	11
USE OF FUNDS	12
INCORPORATION, AFFILIATES AND HISTORY	13
MILESTONES	13
KEY MEMBERS	14
DEVELOPMENT TEAM	14
MEDIA ENQUIRIES	14
LINKS	14
ACKNOWLEDGEMENTS	15

## DISCLAIMER

PLEASE READ THIS SECTION CAREFULLY. IF YOU ARE IN ANY DOUBT AS TO THE ACTION YOU SHOULD TAKE, YOU MUST CONSULT YOUR LEGAL, FINANCIAL, TAX, OR OTHER PROFESSIONAL ADVISOR(S).

The information contained in this white paper is being provided to the recipient solely for the purpose of evaluating the acquisition of USAT Tokens from the United Scientists Association of Technology Inc. (hereinafter USAT Inc. or the association).

The information set forth below may not be exhaustive and does not imply any elements of a contractual relationship. While USAT Inc. makes every effort to ensure that any material in this white paper is accurate and up to date, such material in no way constitutes the provision of professional advice. It has been prepared without taking into account any USAT Token holder's objectives, financial situation or needs. The USAT Token holders should read the white paper carefully and assess whether the information is appropriate for them in respect of their objectives, financial situation and needs.

The provision of this white paper is not and should not be considered as a recommendation in relation to acquiring USAT Tokens from the association, or that acquiring USAT Tokens from the association is a suitable investment for the recipient, should the recipient comprehend USAT Tokens as an investment or security. The USAT Tokens holders should seek appropriate independent professional advice prior to relying on, or entering into any commitment or transaction based on, material published in this white paper, which material is purely published for reference purposes alone.

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The delivery of this white paper does not under any circumstances imply that the affairs or prospects of the association or any information affecting it have been fully or correctly stated in this document or have not changed since the date of this document or since the date at which the information is expressed to be applicable. No responsibility or liability (including in negligence) is assumed by the association and its affiliates for updating any such information or to inform the recipient of any new information of which the association and its affiliates may become aware.

The association makes no representation about the underlying value of the USAT Tokens on offer. Prospective contributors must make their own assessment about whether the exchange rate of the USAT Tokens being offered represents fair value.

There may be matters in this publication that are forward-looking statements. Such statements are only predictions and are subject to inherent risks and uncertainty. Forward-looking statements, which are based on assumptions and estimates and describe the association's future plans, strategies, and expectations are generally identifiable by the use of the words 'anticipate', 'will', 'believe', 'estimate', 'plan', 'expect', 'intend', 'seek', or similar expressions. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties both general and specific that contribute to the possibility that these predictions, forecasts, projections and other forward-looking statements will not occur. Those risks and uncertainties include factors and risks specific to the industry in which the association operates as well as general economic conditions and prevailing exchange and interest rates. Actual performance or events may be materially different from those expressed or implied in those statements. The association undertakes no obligation to publicly update or revise any forward-looking statements provided in this publication whether as a result of new information, future events or otherwise, or the risks affecting this information. None of the association, its officers or any person named in this publication with their consent, or any person involved in the preparation of this publication, makes any representation or warranty (express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement. The forward-looking statements reflect the views held only as at the date of this white paper.

USAT Inc. does not accept any responsibility for any costs incurred by any person in relation to the person's evaluation of the association and the USAT Tokens under this white paper or otherwise.

**Citizens or residents (tax or otherwise) of the Commonwealth of Australia and United States of America and their territories are prohibited from participation in this ICO.**

**The citizens of all other countries are strongly advised to seek advice from legal experts and tax professionals for compliance with the local legislation, prior to engaging in ownership, transfer, creation and exchange crypto (virtual) currencies.**

## **Warning to participants**

**Do not send Ether from Cryptocurrency Exchanges, a.k.a Digital Currency Exchanges (DCE). It will result in losing your Ether and USAT Tokens.  
Use MyEtherWallet only (<https://www.myetherwallet.com/>).**

**United Scientists Association of Technology Inc. takes no responsibility for loss or damages if you use wallets other than MyEtherWallet  
(<https://www.myetherwallet.com/>).**

## THE ICO

This is an Initial Coin Offer (ICO) of the United Scientists Association of Technology Inc. (USAT Inc.). USAT Inc. is a not-for-profit association incorporated in Queensland, Australia (Organisation Number: IA57460) and it is subjected to annual audits and reports to the Australian government. The association is the founder and the developer of the USAT Inc. platform, which is an accelerator that connects inventors of new technologies with the financial world, aiming to provide liberty, autonomy and security to all participants.

The association operates from the Innovation Centre Sunshine Coast P/L (ICSC) - a leading business incubator and accelerator, which is a subsidiary of the University of Sunshine Coast, Queensland, Australia.

USAT Inc. is affiliated with the Australian Institute of High Energetic Materials (AIHEM). AIHEM is an Australian based professional alliance, which was established in 2009 with a mission to facilitate research in fundamental and applied science directed towards expanding human knowledge. AIHEM is engaged in an extensive network of international collaborations with leading scientific organisations and prominent individual scientists and engineers. Currently, AIHEM unites 138 Professors, 65 Associate Professors, 89 scientists with Doctoral Qualification and 28 holders of MSc in Engineering from over 50 countries.

USAT Inc. holds an Intellectual Property (IP) repository, which possesses legal, identifiable, intangible assets in the form of patents and trade secrets. The USAT Inc. IP repository is open for shared ownership over the stored patents and trade secrets through a smart contract issued tokens known as USAT Tokens. A USAT Token is a token of shared ownership over all present and future patents and trade secrets stored into USAT Inc. IP repository. Purchasing a USAT Token initiates a transfer of consideration to the buyer of a stake in the patents and trade secrets that are stored into the IP repository. A USAT Token holder is a part-owner of all present and future patents and trade secrets stored into USAT Inc. IP repository. USAT Tokens can be purchased in Ethereum (Ether) during the ICO on the USAT Inc. platform and on the secondary markets 14 days after the Allocation Ending Date of the ICO.

The USAT Inc. platform has a constant influx of novel technological proposals from the AIHEM think-tank. These proposals are carefully examined by the scientific and business advisors of the USAT Inc. and selected proposals that have proven their engineering and commercial merit and are granted access into the cycle of financial and technical development. The selected proposals are financed by USAT Inc. in order to develop breakthrough innovative products. All sensitive information submitted to the USAT Inc. platform is stored using a blockchain enabled decentralised distributed storage system. USAT Inc. assists the inventors in patenting the innovative products, then purchases the patents and trade secrets and adds them to the IP repository. The marketing advisors of USAT Inc. facilitate the sale or licensing the IP of the novel products to end users through independent commercial entities, see Figure 1.

Upon successful completion of one project, the management committee of the USAT Inc. makes a decision on distribution of funds to:

- Continue the financial cycle by reinvesting the profit into new projects from the supply pipeline of novel technical ideas brought by AIHEM; and,
- Buyback USAT Tokens from the Crypto Exchange Markets.

The current ICO involves USAT Inc. issuing 1.525 billion USAT Tokens as tokens of shared ownership of all present and future patents and trade secrets stored into the USAT Inc. IP repository. All available USAT Tokens will be issued during the distribution period of the ICO. This token issue will be a one-time operation and no additional issuance is available for USAT Tokens.

USAT Inc. intends to accumulate funds in form of Ether in exchange of 50% of the USAT Tokens issued to raise a hard cap of \$53,375,000 worth in Ether. The soft cap has been set at \$2,834,000 worth in Ether. The distribution will start at \$0.08 worth in Ether at the beginning of the ICO and end at \$0.20 worth in Ether per USAT Token spread throughout the exchange campaign.

N.B. The USAT Tokens are denominated in US dollars.

All USAT Token holders can exercise the right to keep the tokens or to sell them on the Crypto Exchange Markets.

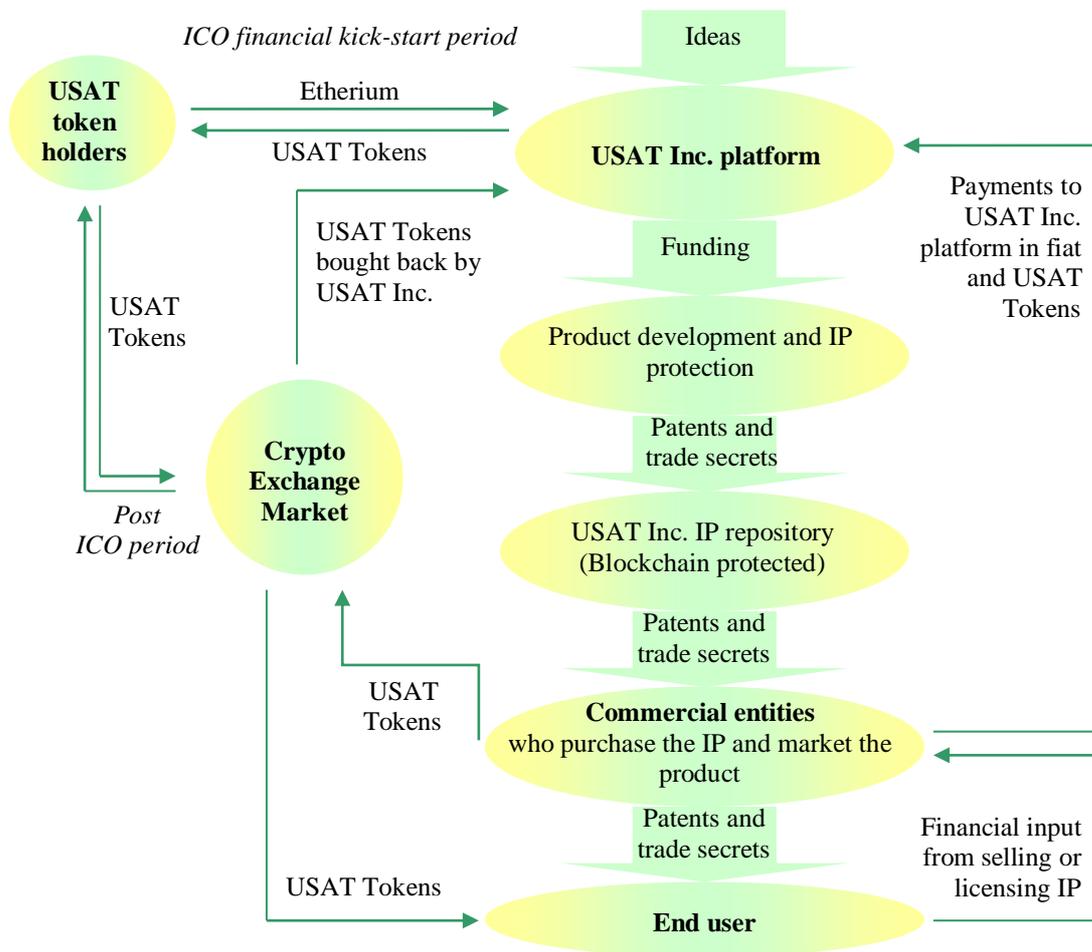


Figure 1. USAT Inc. platform cycle and growth of USAT Tokens.

The USAT Inc. IP repository currently owns two patents:

- Patent # AU 2017100315 “A multi-layered structural material for conversion of solar radiation to kinetic energy of fluids”
- Patent # AU 2017101410 “Recuperation of waste heat to co-generate electricity in solar-wind farms”

**Patent # AU 2017100315** “A multi-layered structural material for conversion of solar radiation to kinetic energy of fluids” depicts and protects a novel method and apparatus for converting solar radiation to electricity in a facility that is known as a solar-wind farm.

**Patent # AU 2017101410** “Recuperation of waste heat to co-generate electricity in solar-wind farms” depicts and protects a technology in which waste heat from computers and other electronic components and devices, as well as waste heat from other resources can be recuperated to electricity in solar-wind farms. In the process of recuperation, the waste heat supplements solar energy as a source for generating electricity in the solar-wind farms, which increases the rate of electricity generation and reduces the electricity cost.”

These two patents protect a novel, highly efficient method for conversion of solar energy to electricity and recuperation of waste heat from cryptocurrency mining facilities. This renewable energy technology is cost effective because of the low manufacturing, installation and maintenance expenses and also due to the fact that there is no fuel component in the total cost of the generated electricity.

The solar-wind farm is capable of electricity generation during cloudy days and night time due to the heat stored in the ground. The facility does not emit carbon dioxide. The carbon footprint of the solar-wind farm is close to zero, especially when recycled steel, aluminium and plastic are used as structural materials. The solar-wind farms are capable of utilising terrains of low value; for example, abandoned quarries, landfills, deserts, steep hills etc., and they can be used in rehabilitation of closed mines and landfills. Water condensate from the solar-wind farms can be collected and used for agricultural purposes and irrigation of lawns.

The patented technology can also utilise waste heat from computers and other electronic components and devices, as well as waste heat from other resources that can be recuperated to generate electricity.

In the process of recuperation, the waste heat supplements solar energy as a source for generating electricity in the solar-wind farm, which increases the rate of electricity generation and reduces the electricity cost. In this case, the solar-wind farm can be assembled in a size that is sufficiently large to compensate for all energy losses and to satisfy energy demands of the consumers of electricity, thus making the consumers partially or fully autonomous and independent of external energy supply. Heat storage pools store energy that allow for an uninterrupted supply of electricity to the consumers during night time and periods of limited irradiation from the sun.

In summary, the patented technologies currently owned by the USAT Inc. IP repository can:

- Provide the end electricity consumers with competitive advantages by reducing the production cost of the electricity below the level of the next cheapest electricity generating method;
- Allow the electricity users to become fully autonomous from external suppliers with all benefits arising from this independence;
- Facilitate capital growth for IP owners (which are all USAT Token holders);
- Ensure continuation of the financial cycle of USAT Inc. platform.

## ROADMAP

Table 1. Achievements and scheduled tasks.

<b>#:</b>	<b>Tasks:</b>	<b>Time frame:</b>
1	Seeding and founding AIHEM	2009
2	Submission of proposals by AIHEM members	Continuous process
3	Seeding and founding the USAT Inc. platform and IP repository	July 2017
4	Submission of proposals to USAT Inc. IP repository	July 2017
5	Engagement of independent auditors for IP pre-selection	August 2017
6	Completion of the IP pre-selection	September 2017
7	Acquisition of the IP	October 2017
8	Appointment of web-page & ICO development teams	October 2017
9	Appointment of legal, accounting, marketing and PR teams	November 2017
10	Launch of the web-site	December 2017
11	World-wide advertising and marketing	December 2017
12	Commencement of the ICO	June 2018
13	End of the ICO	Before end of 2018
14	Pre-selection and acquisition of more patents to the IP repository	Continuous process

Note: All time frames are based on estimates and may vary.

## CROWDFUNDING AND HOW TO PARTICIPATE

The launch of the USAT Inc. platform and the corresponding USAT Token creation process is organised through smart contracts operating on Ethereum technology.

The anticipated commencement date of the Pre-ICO is on the 15<sup>th</sup> of June, 2018 or the date stated on the website of USAT Inc.

The Pre-ICO is expected to end on 15<sup>th</sup> of August, 2018.

The ICO will end before the end of 2018 (exact dates to be confirmed).

USAT Tokens distribution process includes:

- USAT Inc. platform implements the smart contracts and manages the address to which corresponding Ether will be sent.
- The launch of the ICO will take place on the website of USAT Inc.
- Orders will be taken from the USAT Inc. website where a smart contract will automate the exchange of Ether for USAT Tokens.
- USAT Tokens acquired by contributors will be allocated to their nominated accounts.
- The exchange of Ether to USAT Tokens occurs on the website of USAT Inc. <https://usat.io>
- The USAT Tokens are denominated in US dollars.
- The USAT Tokens allocation to nominated addresses should be completed within 24 hours after the end date of the ICO (the "Allocation Ending Date").
- The USAT Tokens will be permitted access to the secondary markets 14 days after the Allocation Ending Date.
- Information on the launch of the ICO will be available on the USAT Inc. website. <https://usat.io>

Contributors can request information by emailing USAT Inc. at [info@usat.io](mailto:info@usat.io)

To ensure participation, please contact USAT Inc. at [info@usat.io](mailto:info@usat.io)

## ICO MECHANISM

Pre-ICO:	June 15 <sup>th</sup> to August 15 <sup>th</sup>
Start of ICO:	After August 15 <sup>th</sup> (exact date to be confirmed), 2018
End of ICO:	Late 2018
Duration:	2 months
Supply:	381,250,000 USAT Tokens
Receive:	\$53,375,000 at an average price of \$0.14 worth in Ether

The exchange rate will start at \$0.08 worth in Ether per USAT Token and finish at \$0.20 worth in Ether per USAT Token.

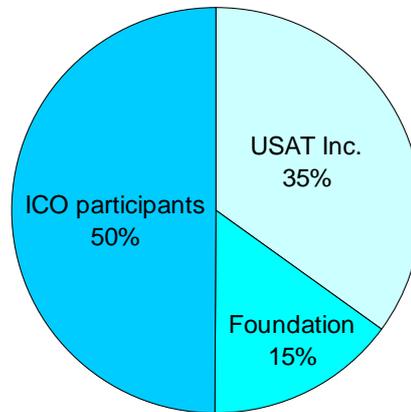
The distribution mechanism follows a geometric model. This is an exponential function in the form of  $y=a^x$ . The exchange rate increases exponentially for every increasing demand by a factor of 9. The exchange rate adjusts 10 times via a geometric model. For every 38,125,000 USAT Tokens exchanged during the ICO, the exchange rate will increase by a ratio of 1.096.

Starting with \$0.08 worth in Ether and a cap of \$0.20 worth in Ether per USAT Token, and assuming a supply of 381,250,000 USAT Tokens on the ICO, USAT Inc. will receive a maximum of \$53,375,000 worth in Ether.

## USAT TOKEN DISTRIBUTION

All available 1.525 billion USAT Tokens will be issued during the Distribution Period. This will be a one-time operation and no additional issuance is available for USAT Tokens.

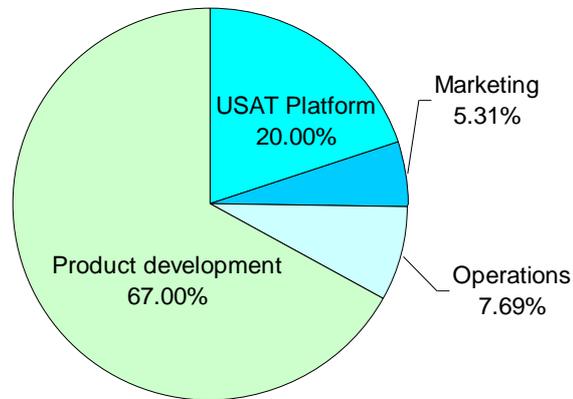
### ICO TOKEN DISTRIBUTION



- 50% of the USAT Tokens will be allocated to the public participants who contributed in the Distribution Process via smart contract and private distribution;
- 35% of the USAT Tokens will be allocated to the association's reserve to be distributed at the discretion of USAT Inc. This reserve is a necessary foundation for sustainable future growth of the USAT Tokens;
- 15% of the USAT Tokens will be dedicated for private allocations.

## USE OF FUNDS

### DISTRIBUTION OF PROCEEDS



The total amount of funds expected to be accumulated during the Distribution Period is planned to be allocated as follows:

- 67.00% for the product development, which includes the development of the USAT Inc. platform and IP repository, and purchase of patents;
- 7.69% for operations;
- 5.31% for marketing;
- 20.00% for cost of the support team to USAT Inc. platform (IT & ICO developers, legal, accounting, marketing and PR advisors).

## INCORPORATION, AFFILIATES AND HISTORY

USAT Inc. is affiliated with the Australian Institute of High Energetic Materials (AIHEM). AIHEM is an Australian based professional alliance which was established in 2009 with a humanitarian mission to facilitate research in fundamental and applied science directed to expanding knowledge.

AIHEM is under the governance of USAT Inc., which is appointed to act on behalf of the alliance in all regulatory, legal and financial matters. The internal affairs of the alliance are governed by an Academic Council.

The AIHEM membership is open to all academies; universities and colleges; academic, scientific, and research organisations; scientists; engineers; or other individuals that support the humanitarian mission of the alliance.

AIHEM is engaged in an extensive network of international collaborations with leading scientific organisations and prominent individual scientists and engineers. AIHEM publishes selected scientific papers and research reports in the Research Bulletins of the Australian Institute of High Energetic Materials and organises Australian and International Conferences and Symposia. During the years of activity, a significant number of selected scientists have joined the group of AIHEM Honorary Fellows.

USAT Inc. brings to the AIHEM members a world-class level of guidance in IP protection, managerial support, legal assistance, and sales and marketing expertise. In return, the affiliation of USAT Inc. with AIHEM provides a competitive advantage in the form of human capital to USAT Inc.

USAT Inc. and AIHEM operate from the Innovation Centre Sunshine Coast P/L (ICSC) - a leading business incubator and accelerator, which is a subsidiary of the University of Sunshine Coast, Queensland, Australia. This location secures mentoring advice from ICSC Management and Mentor Panel and has access to the Engage Lab, Engineering Learning Hub, and research facilities of the University of Sunshine Coast. The Innovation Centre also provides reciprocal benefits with other business incubators, including ATP Innovations, iLab, River City Labs, and Angel Cube; along with advice on offshore landing zones i.e. Silicon Valley, Austin, London, Amsterdam, Singapore, and others.

## **Milestones**

**2009-** AIHEM organised the 2009 International Conference on Chemical, Mechanical and Materials Engineering and published the conference proceedings.

**2009-** AIHEM signed the first of its numerous Memoranda of Understanding for scientific collaboration with universities and industrial enterprises.

**2010-** Published 2009 Research Bulletin of the Australian Institute of High Energetic Materials.

**2011-** Published 2010 Research Bulletin and Vol. 1 of the 2011 Research Bulletin of the Australian Institute of High Energetic Materials.

**2011-** Launched 12 workshops for intensive professional development of engineers.

**2012-** Published 2011 Research Bulletin of the Australian Institute of High Energetic Materials Vol. 2.

**2012-** Launched the Postgraduate Engineering V-Conference (PEV-C) - the only real-time online scientific conference for postgraduate engineering students in the world.

**2012-** Designed an electronic device for real-time precise measurements of energy consumption by humans.

**2012-** Designed original projectiles with elongated underwater effective range for rifle-bored small arms and ordnance for targeting deep underwater objects.

**2013-** Designed a novel method for the creation of plasma zones of high velocity and pressure to allow soft cracking of the rock beds of oil and coal seam gas wells.

**2014-** Designed and tested an original acoustic warning system for vehicles exceeding the speed limit.

**2014-** Received a Skills & Knowledge Award from the Ministry of Industry of Australia for commercialisation of the novel technique for Digital Particle Streak Velocimetry (DPSV).

**2015-** Designed a system for aerodynamic protection of the bearings of pulleys and idle rollers for the Australian mining industry.

**2017-** The United Scientists Association of Technology Inc. is created.

**2017-** The United Scientists Association of Technology Inc. IP repository is created.

**Cont.-** Mentoring Australian engineering students through AIHEM and The United Scientists Association of Technology Inc.

## Key members

Visit <https://usat.io> to see the key team members.

## Development team

Senior Development Team members: Pactum

Find them at: <https://pactum.io>

Visit <https://usat.io> to see the rest of our team.

## Media enquiries

Most team members are available for interview or comment. Please direct all media enquiries and requests to [info@usat.io](mailto:info@usat.io)

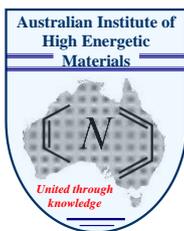
## Links

The United Scientists Association of Technology Inc. website: <https://usat.io>

The United Scientists Association of Technology Inc. videos:  
<https://vimeo.com/user79685243>

AIHEM website: <http://www.ausihem.org>

## Acknowledgements



*AIHEM gratefully acknowledges the receipt of a Skills and Knowledge grant from the Commonwealth of Australia for obtaining expert advice and services to assist in the commercialisation of a novel laser flow visualisation technique developed by the AIHEM researchers.*



*USAT Inc. gratefully acknowledges the assistance of the Innovation Centre Sunshine Coast P/L in providing laboratory space for testing a working prototype of a renewable energy facility that utilises the principles of a novel solar-wind technology owned by the association.*