

# Whitepaper

by Dacher Systems GmbH  
for the skynavpro™ project

## sky nav pro

Improved flight safety through the worldwide first navigation solution that unites weather, 2- way-communication, live-tracking and collision avoidance in one single Box



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## 1. Summary

skynavpro™ is a planning and navigation software integrated in a specially developed hardware for communication, collision avoidance and live tracking for general aviation. It is the first product in the world which successfully combines these extremely useful features in a single and portable box that can be cost efficiently mass-produced. Our long-term goal is to develop an extensive system-level integrated cockpit architecture based upon portable devices. The software, consisting of an online planning and navigation application, is offered free of charge. For additional and premium services (such as live weather data, collision alerts, worldwide tracking with integrated SOS feature) the specially designed and developed hardware is required. The hardware will be available in a variety of models on our online shop as well as through certified partners. Throughout central Europe skynavpro™ is an already well-established brand and hardware prototypes are already developed. Due to its system level integration concept it can easily fit in any manned and unmanned aircraft (e.g. drones, UAV's).

Therefore, Dacher Systems GmbH plans the initiation of an ICO. The proceeds of which will be directed towards the development of a new blockchain-operated flight-planning and tracking platform as well the production of the first units for mass market. This will be launched worldwide through several phases. The platform is unique and has the potential to establish itself as a standard in general and business aviation.

The name of the Token is: skynavpro [SNP]



## 2. The Problem

In general aviation on average, old age aircrafts and technologies meet modern UAV's (Unmanned Aerial Vehicle, commonly known as drones). These UAV's are equipped with most modern electronics; however, they are not yet considered in a systematic solution for the safe execution of air traffic. Due to an expected duplication of air traffic and a massive increase in UAV's by 2035, the air traffic density will grow dramatically worldwide, with dangerous approaches already happening frequently. Therefore, organisations such as AOPA, EBAA, ECOGAS, ERAC, and GAMA call for a solution for the safe execution of air traffic and the transmission of flight important data. International regulations (e.g. Single European Sky, SESAR, ADS-B Out 2020, NextGen) ask for digital networking to preserve and increase safety. A modern networking solution that covers the entirety of air traffic is not available; that is where the skynavpro™ network comes in.





### 3. Business Idea

The foundation of the business idea is the fact that, there is currently no planning and navigation tool on the market that incorporates the valuable services of in-flight live weather data, collision alerts for all surrounding air traffic and live flight tracking integrated in a single mobile device. skynavpro™ unites all relevant flight information in one application: free planning and navigation, flying weather data, 2-way text communication, worldwide tracking and a traffic monitor for collision avoidance. SOS emergency calls can be communicated automatically, and positions and accelerations can be measured via GNSS (Global Navigation Satellite System) or g-force sensor. By accessing all process-relevant data via standardised communication channels, permanent availability during all phases of the flight is guaranteed. The pilot of the aircraft or UAV will therefore be relieved. Additionally, the direct transmission of valuable data increases safety in general aviation – manned or unmanned – with each flight!



In the flight-planning and managing tool a free account is created. Within this, premium services (e.g. weather, communication, tracking and additional map information) can be booked over the basic features provided. To make these services available during flight the purchase of the skynavpro™ hardware is required. The basic model is the BlueLine, which provides the fundamental communication solution for tracking and weather data. The advanced RedLine is step-up compatible and completes the BlueLine through the integration of collision avoidance systems such as ADS-B (Automatic Dependant Surveillance – Broadcast) and FLARM.

Each user can set an individual budget in the flight-planning and management portal. The SNP tokens will then be transferred to the user's account from a smart-contract portal, which is based on the Ethereum blockchain. The budget of SNP-tokens will fund the fees for the add-on-services.

### 4. Aim

Our aim is to expand within the international market based on the great experiences and pilot needs we recognized at our trade shows across central Europe and to grow with regards to the UAV market. Our innovative and unique solution satisfies worldwide requirements and is the only system operator that provides a flight-safety concept for the entirety of air traffic. Nationwide hardware-sales, as well as continuously selling add-on-services generate permanent, sustainable and stable sales figures.



Our customers profit by the network effect of the total system. Since the Ethereum blockchain is based on the pay-per-use model, costs only apply for the actual use of a service, for example in weather, tracking, communication, landing charges or refueling.

**Market Volume:**  
**\$ 2,330,000,000**

[worldwide]



**Our Investment:**  
**\$ 1,250,000**

[until now]



## 5. Mission & Vision

Basic services like flight-planning and navigation will be provided free of charge to pilots of aircrafts and UAV in the B2C. Thus, essential information is actually already implemented and available. Add-on-services which require one of the hardware Box will become available and quickly applicable in 2019. This will effectively increase flight-safety in GA (General Aviation).

The communication technologies combined in the new skynavpro™ network will render innovative solutions for increased safety in air traffic. The data-exchange on several levels between all traffic, as well as ground-stations and operators, or simply for flight-planning and evaluation purposes, it offers a variety of premium and additional services. These are available to all manned and unmanned aircrafts in general aviation. Further, by using the pay-per-use model costs only apply once the customer makes use of the services. Due to the blockchain technology all services can be displayed better, processed faster and fraud resistant.

A new Automated Pilot Assist System (APAS) is currently in development with notable partnerships. This will allow autonomous UAV flights in multi-use air space with mixed traffic, to be safe and without endangering others. This skynavpro™ network based solution, was demonstrated for the first time at the aviation exhibition in Ghana in 2017. Especially in remote areas with weak infrastructure the interest in APAS is considerable. Individual development is already in negotiation with military and governmental institutions.





## 6. Market & Competition

To keep the entry barrier for each pilot in GA (General Aviation) low the hardware price is kept to a minimum. In addition to that, the concept of free basic services in combination with the pay-per-use model for premium services is absolutely new in GA and revolutionises the market. Thus, we set standards in an otherwise stiff aviation-navigation market, dominated by larger providers like GARMIN and Jeppesen. However, the B2B market with regards to UAV'S and drones, is therein not yet considered as it currently evolves dynamically and uncontrollably.

The potential of 385,000 active private pilots in Europe is massive. Of these, 95,000 are located within the German-speaking countries, followed by France (60,000) and Italy (45,000). In 2017, the business volume for avionics in civil aviation amounted to ca. 23. Billion US-\$ per year, of which 2.4 Billion US-\$ were in general aviation. Until 2025 a growth of 3.5 – 7.9 % is predicted.

## 8. Channels of Distribution

The short-term goal is the quick market penetration with the free basic services. The second step is to earn money through the distribution of our premium services. Another goal relies upon the increase of our brand's popularity and to establish it as an alternative to the expensive and stiff systems currently on the market. Therefore, we use trade fairs, trade magazines, social media and Fly-Ins.



## 9. Strategy

To achieve a successful market penetration a large popularity and acceptance of the solution must be attained. This shall be supported by providing free basic services, such as online flight-planning and app-based navigation. Merely for additional services will a pay-per-use model be realised. Thereby we segregate ourselves from old-fashioned competitors, who hold on to their technologically traditional concepts. Our modern solution is set to completely overturn the current market. As pilots like to rely upon long-standing trust rather than new, networked and modern technologies, this will take a certain amount of time. Young pilots, youth organisations and innovators shall lead our pioneering designs towards a follow-up strategy.



## 10. USP

skynavpro™ features a light and portable box which integrates the aircrews Android or iOS devices (free apps) into a worldwide hybrid communication network. Thus, it allows to integrate two-way communication, real time reception of weather information, live tracking and collision-avoidance (ADS-B and FLARM®) into a moving map navigation solution. skynavpro™ is server based and employs open source interfaces for seamless integration of third-party providers. Many built-in devices are outdated because simple updates are not possible, and technology evolves quickly (e.g. map updates, airspace structure, airfields, frequencies). The aim is integration.

### Free services:

- online flight-planning via <https://fly.skynavpro.aero>
- Navigation app for iOS and Android
- Aeronautical charts including vertical terrain and airspace profile
- Weather, i.e. GAFOR/TAF forecasts
- Offline weather for flight-planning and navigation
- Compare petrol prices on different airfields

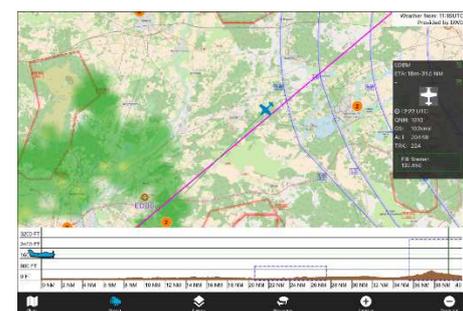
### Pay-per-Use:

- Multiple data-link communication channels, LTE and Iridium
- Live flying weather during flight operation
- Worldwide 2-way text communication
- Worldwide tracking and monitoring
- SOS Emergency button, global availability
- Pay petrol prices at selected stations
- Calculate landing charges via app

## 11. Marketing

As a modern solution we rely mostly on new media, online and with a quick spread.

- Social networks – Further developing the company website on the most popular networks (Facebook, Twitter, LinkedIn, XING, etc.). Possibility for information and multimedia placements. Possibility for customer relations.
- Search engines – All search engines already deliver many results for skynavpro™ within an organic search. skynavpro™ shall be further promoted by additional Ad-Words, thus appearing within sponsored links in the organic search of search-engines. This is possible due to the work with the Google Ad-Sense program.
- PR-portal – Promotional articles as well as articles about the skynavpro™ services and products shall be placed on PR-portals that are accessible to public.
- Blogs – Frequent placements of information on products and services, news and modifications on various specialist blogs.
- Forums – Goal is to give users a better understanding of services and the brand that is skynavpro™



## 12. Roadmap



- 03.2014 – Founding the skynavpro™ core-team
- 05.2015 – Launch of FLY, flight-planning and navigation in its basic functionality
- 04.2016 – World premiere at AERO trade fair in Friedrichshafen
- 06.2016 – Presentation of the navigation app
- 04.2017 – Presence at AERO trade fair in Friedrichshafen
- 05.2017 – Fly-In to Avieur in Eisenach
- 06.2017 – Presence at AERO Expo in Lyon/FR
- 06.2017 – Presence at UK AERO Expo in High Wycombe/GB
- 09.2017 – Fly-In to Avieur in Eisenach
- 11.2017 – Presence at African Airshow in Accra, Ghana
- 04.2018 – Presence at AERO trade fair in Friedrichshafen
- 06.2018 – Presence at AERO Expo in Paris/FR
- 06.2018 – Presence at UK AERO Expo in High Wycombe/GB
- 07.2018 – Fly-In to WINGLY in Koblenz
- 09.2018 – Fly-In to Avieur in Eisenach
- 11.2018 – Start skynavpro™ Pre-Sales SNP Token
- 12.2018 – Start skynavpro™ ICO 1st Stage
- 02.2019 – Start skynavpro™ ICO 2nd Stage
- 04.2019 – End of skynavpro™ ICO
- 05.2019 – SNP Token Trade
- 06.2019 – Start of skynavpro™ FLY flight-planning and navigation platform with Blockchain functionality
- 08.2019 – Start of skynavpro™ app with blockchain functionality & serial production of the Box BlueLine and RedLine
- 2020 – Start Distribution & Business Development sales efforts Europe
- 2021 – Start Distribution & Business Development Northern America/Canada
- 2022 – Start Distribution & Business Development Asia/Pacific
- 2023 – Start Distribution & Business Development Rest of World

## 13. Application of funds

Use of investments for the internationalisation and scaling of success:

Sum \$	Purpose	Time range
1,000,000	Implementation of Blockchain-functionality, expansion of FLY platform „pay-per-use“	6 months
1,500,000	Serial production of the box	36 months
1,500,000	Distribution Europe	12 months
2,500,000	Distribution Northern America/Canada	24 months
1,500,000	Distribution Asia/Pacific	24 months
1,500,000	Distribution Rest of World	24 months
500,000	Administration	36 months

A budget of roughly \$ 9,000,000 would make the ideal foundation for the targeted process. If the resources from the Token sale would not suffice, the platform will be structured from later proceeds. The intense and certainly aggressive distribution serves the increase in global popularity.

## 14. Token

The amount of SNP Token distributed is limited to 400,000,000 and can therefore not be elevated. The use of SNP Token on the platform is mandatory. However, customers can easily interact with common Fiat currencies. To achieve this merely the API-function must be undergone to convert into SNP. Thus, the SNP Token will become the accredited payment method within the skynavpro™ platform. However, aside from SNP's, Fiat currencies such as EUR/USD/CHF are also accepted. The integrated Exchange-API converts the transactions realised with Fiat-currencies into SNP to increase usability. Therefore, the end-user can still use the system without constraints and aside their crypto-affinity. The pay-per-use model is supported by Smart Contracts. Smart Contracts embody the code or computer protocol on the Blockchain that form the elements of the contract. The contract details and specific functionalities are therefore safely implemented on the Blockchain. Smart Contracts offer various advantages. They can not be manipulated, are highly automated and can follow a standardised execution. In relation to content (weather, tracking, communication) via Smart Contracts, the payment follows without an (expensive) intermediary as for example PayPal. The content will immediately and automatically become available to the purchaser through the skynavpro™ hardware.

Dacher Systems GmbH issues a total amount of 400,000,000 SNP Token of which 240,000,000 will be sold within the Initial Coin Offering (ICO). Dacher Systems GmbH will not release any further Tokens, once all 400,000,000 Tokens are sold. During the Pre-Sales and ICO, Ethereum (ETH) will be the only acceptable payment method. The SNP-Token is an ERC-20 Utility Token, which is available during the selling period.

You will find the essential information on the SNP Token sale in the following;

- Pre Sales: 03<sup>th</sup> December 2018 to 31<sup>th</sup> December 2018
- ICO, 1<sup>st</sup> Stage: 31<sup>th</sup> December 2018 to 15<sup>th</sup> February 2019
- ICO, 2<sup>nd</sup> Stage : 15<sup>th</sup> February 2019 to 15<sup>th</sup> April 2019
- Total-Token amount: 400,000,000 SNP
- Token for sale: 240,000,000 SNP
- Value: 1 SNP = 0.070 \$ (+ Bonus)
- Accepted currency: ETH

### Token Bonus Structure

- During the SNP Token Pre Sales, which runs from 03<sup>th</sup> December 2018, 10:00 UTC to 31<sup>th</sup> December 2018, 09:59 UTC, the following conditions apply:

60,000,000 SNP, 1 SNP = 0.035 \$ (50% Bonus)





- During ICO 1<sup>st</sup> Stage of the SNP Token sale, which runs from 31<sup>th</sup> December 2018, 10:00 UTC to 15<sup>th</sup> February 2019, 09.59 UTC, the following conditions apply:  
80,000,000 SNP, 1 SNP = 0.045 \$ (35% Bonus)
- During ICO 2<sup>nd</sup> Stage of the SNP Token sale, which runs from 15<sup>th</sup> February 2019, 10:00 UTC to 15<sup>th</sup> April 2019, 10:10 UTC, the following conditions apply:  
100,000,000 SNP, 1 SNP = 0.070 \$ (no bonus will be awarded)

	Date	Price SNP \$	SNP Volume	Amount \$
Pre Sales	03. Dez 18	0.035	60 Mil	2,1 Mil
ICO 1st stage	31. Dez 18	0.045	80 Mil	2,7 Mil
ICO 2nd stage	15. Feb 19	0.070	100 Mil	4,2 Mil

**Hard Cap:** 9 Mio \$

**Soft Cap:** Not required, as we are a true utility token under German regulations and already have a working Product, we do not require a Soft Cap.

**Minimum contribution:** 1 ETH

**Token distribution**

Regarding the SNP Token distribution:

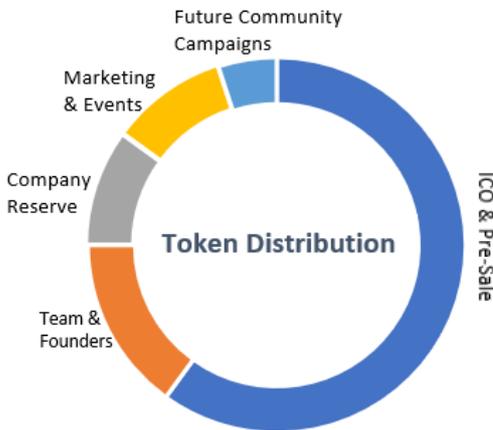
- 60% of the Tokens are reserved for the pre-sale and ICO.
- 10% of the Tokens are reserved for company Reserve
- 10% of the Tokens are reserved for Marketing & Events
- 5% of the Tokens will be used for promotion of quicker acceptance of the product, as well as for customer relations (Future Community Campaigns)
- 15% of the Tokens are intended for the Core Team & Founders

**Allocation of financial resources**

The use of the financial resources from the Token-sales is planned for the following purposes:

- 10% of the Contribution are planned for the extension of the FLY platform
- 15% of the Contribution will be directed towards production
- 15% of the Contribution will be allocated towards sales & marketing within Europe
- 25% of the Contribution are planned for sales & marketing in Northern America/Canada
- 15% of the Contribution are planned for sales & marketing in Asia/Pacific
- 15% of the Contribution will be allocated towards sales & marketing in the Rest of the World
- 5% of the Contribution will be reserved for administrative purposes (security, legal counselling, accounting)

The SNP Token does not represent any legal claims to the project or the company. Instead, customers shall use it as payment method once the project is completed. The SNP Token is an ERC20 Utility Token. We firmly believe in the success of our project. Consequentially, the demand for our SNP Token will increase gains on trading platforms. The Token therefore holds inherent value.



## 15. Founder & Core-Team

Idea provider, visionary, founder and shareholder of Dacher Systems GmbH is Tiberius Dacher. Mr. Dacher is currently the CEO of Dacher Systems GmbH. The project skynavpro™ started in 2014. In 2016 it was first presented to interested specialist audience at the biggest European “Global Show for General Aviation” (AERO) in Friedrichshafen. Since then it has continuously and consistently evolved. With skynavpro™, Dacher Systems GmbH aims to revolutionise the worn-down structures of General Aviation in avionics and communication. The professed long-term goal is to create an extensive system-level integrated cockpit architecture based upon mobile devices. The project currently lists more than 12,000 registered users of the fly.skynavpro.aero portal spread globally, with this number growing constantly.

To achieve this ambitious goal, a strong team of aspiring and motivated people were formed. A short excerpt:



Bachelor of Business Administration (BA)  
University of Applied Sciences Düsseldorf  
CEO Founder of Dacher Systems GmbH  
Private pilot  
> 20 years in business management



Bachelor of Science in Aerospace  
Engineering  
Technical University Berlin  
Head of Aviation Solutions  
Private pilot and flight instructor  
> 10 years in General Aviation



Bachelor of Economic Informatics  
Academy of Economics Bucharest  
CIO / Projectmanager software development  
> 20 years in software development



Bachelor of Economic Computer Sciences  
Academy of Economics Bucharest  
Software Analyst and BI developer  
> 15 years in software development

There are currently 12 members of staff working on the project.





## 16. Legal status & regulations

Due to logistic, personnel, tax and other reasons Dacher Systems GmbH operates as a company based under German regulations.

## 17. Disclaimer

The offer for the purchase of SNP Token described in this whitepaper is a voluntary contribution to the development of the project by the current and future skynavpro™ team. The SNP Token neither entitles to reimbursement, nor does it represent direct participation in the company or the profits of the company. Furthermore, it does not give ownership or a represent a claim to the skynavpro™ flight-planning platform, the profits or intellectual property of the product. Each purchaser of SNP Token must be aware that, despite all efforts of skynavpro™ to develop the project further, payed amounts will not be refunded. Moreover, each purchaser must accept the risk of failure of the project, caused by internal or external factors non-influenceable by skynavpro™. skynavpro™ understands and you agree, that you have fully considered all risk factors including but not limited to fluctuations in prices of crypto-currencies and crypto-markets in general; the risks of system-errors; the risks in code-failures; faults; hardware-failures; loss of data; robbery; loss of user names, passwords or private keys; wrongful execution of transactions and/or hacks, that will, among other things, result in the full loss of Token.

## 18. Further documents

On request we are glad to provide you with additional documents like our press mailing list or a more detailed business plan.