



# Corporate Presentation

## Etherstack plc (ASX:ESK)

22 July 2021

*Authorised for release by David Deacon, CEO and David Carter, CFO*



# First Global Teaming Agreement Carrier Contract

## Samsung Contract

- Etherstack has today signed a long term supply contract with Samsung Electronics Co. Ltd, to provide Etherstack software solutions and ongoing support services to Samsung for a telecommunications carrier client of theirs as part of it's 5G network roll-out
- The 5G network being rolled out by Samsung incorporates next generation Mission Critical Push To Talk (MCPTX) technologies utilising core Etherstack network software elements
- By embedding Etherstack's MCPTX related network components within Samsung's advanced 5G network solutions, the Etherstack technology enables interoperability between existing digital narrowband public safety network infrastructure used by public safety agencies globally, and the new 5G network
- Today, and in the future, national telecommunications carriers are expected to provide high availability public safety communication capacity to public safety agencies in each country. There are many regulatory & government driven initiatives around the world in this sector creating demand on 5G carriers for these services
- Typical users of MCPTX networks and services will be blue light agencies (police, ambulance, fire service etc), utility workers and transportation authorities

## Key Terms of the Samsung Contract

- The contract consists of an initial roll-out, during which Samsung will pay a software licencing fee to Etherstack. Subsequent to the network becoming operational, Etherstack will provide support services to Samsung under contract to maintain its software within the 5G carrier network
- The initial support services contract term for the carrier is for three years post deployment, with an option to extend the arrangement with Etherstack
- With the useful life of the network estimated by Etherstack to be 15 – 20 years, Etherstack expects there is a high probability the support services arrangement remains in place for the lifetime of the network, as is typical with major infrastructure projects

# First Global Teaming Agreement Carrier Contract (cont...)

## Key Terms of the Samsung Contract (cont..)

- Total revenues for Etherstack comprising licence fees, project deployment revenues and support revenues are US\$8.5 million, which includes US\$1.2 million revenue previously announced on 18th February 2021
- The term of the contract is 5 years, with the majority of the licence revenues expected to be recognised across the Company's 2021, 2022 and 2023 financial years (31 Dec year end). Initial support revenues included in the deal are expected to commence in 2022 and be earned over 3 years from the date of delivery of the solution to Samsung's customer
- Management expects further long term annual support revenues, while not yet currently contracted, to renew in FY25, with a typical minimum lifespan of 10 – 15 years for public safety infrastructure projects

## Potential future impact

- Etherstack has partnered with Samsung to deliver next generation MCPTX over LTE solutions on the rollout of new 4G & 5G networks globally
- Government awareness, planning and demand for MCPTX over LTE solutions has been steadily growing and is expected to rise rapidly over the next 36 – 48 months
- As previously advised, Etherstack and Samsung have a number of telecommunications carrier pursuits in progress
- Etherstack estimates that over the next 3 – 5 years, telecommunications providers in OECD countries alone will roll out between 60 to 90 5G networks incorporating next generation MCPTX over LTE capabilities. Many more network deployments of this type will occur in non-OECD countries as well





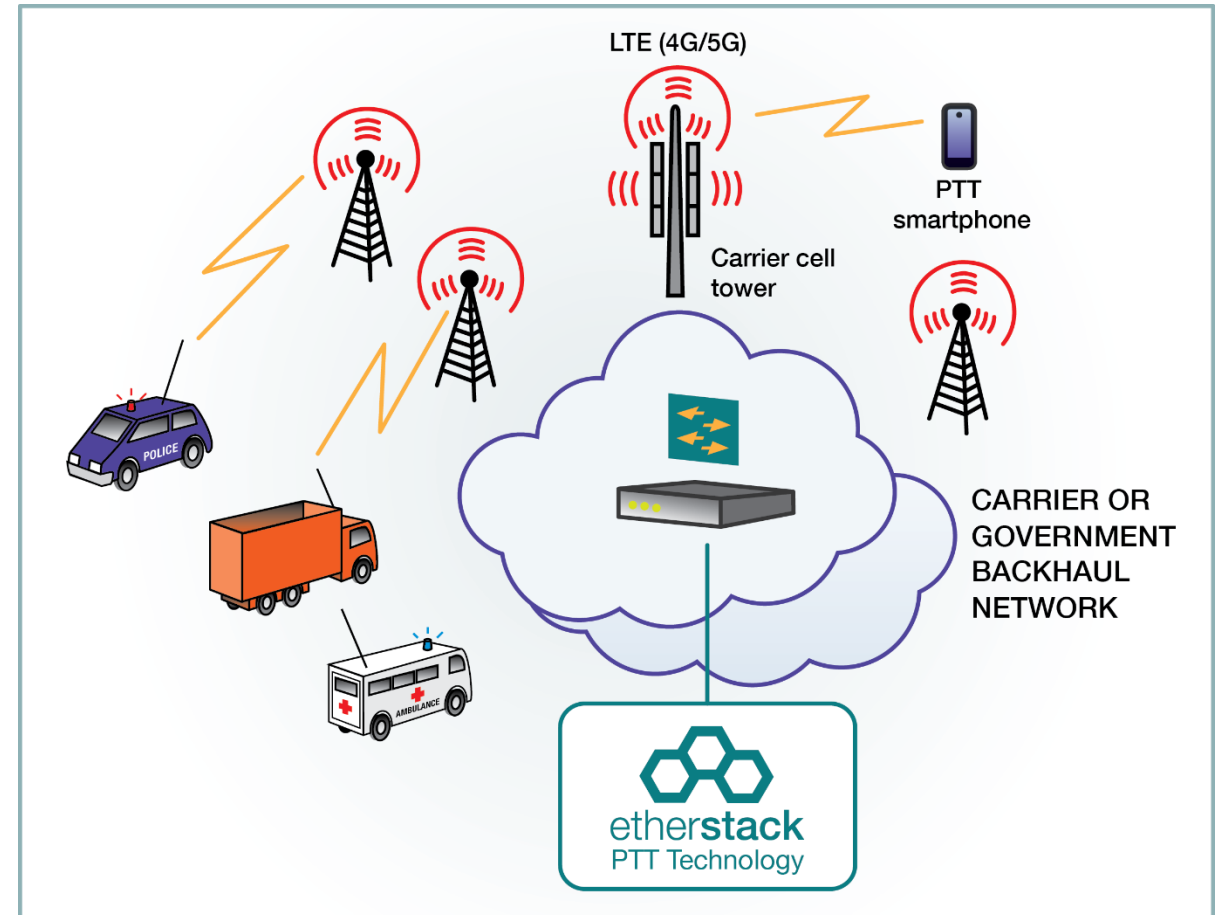
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# COMPANY OVERVIEW

# Etherstack Overview

Etherstack is a leading licensor of wireless communication software, enabling push-to-talk (PTT) communications for essential services, within and across advanced digital land mobile radio, cellular and satellite networks

- Core network products are high margin. These software solutions typically include long term support contracts
- Etherstack core revenues transitioning to an Enterprise SaaS (software as a service) model;
  - This is due to migration of existing PTT network solutions from specialised infrastructure hardware to network cloud based services
- Etherstack's software is underpinned by complex intellectual property developed over the course of 20+ years
- Global teaming partnership with Samsung Electronics with respect to Mission Critical Push To Talk (MCPTX) over LTE to drive additional growth
- Etherstack has a globally diversified client base
- Etherstack maintains R&D and support offices in the UK, US, Japan and Australia



# Our Three Core Markets

Etherstack licenses innovative wireless communications technology across three key platforms



## Cellular networks (4G & 5G)

**Mission Critical Push to Talk (MCPTX) over LTE for new 4G & 5G networks**

- First contract under Samsung Global Teaming Arrangement announced. Multiple other pursuits advancing rapidly

## Terrestrial digital land mobile radio networks

**Wireless communication networks, technology licensing to equipment vendors, cryptographic and defence solutions**

- 13 significant network deployments with long term support contracts currently in place driving recurring revenues

## Satellite Push to Talk (PTT) networks

**Developing secure wireless communications software for Satellite over past 3 years**

- Discussions with satellite communications suppliers to incorporate Etherstack technology in progress

**Able to leverage skillset, R&D and intellectual property developed over 20 years to enable wireless communications for customers within and across key platforms in the essential communications sector**

# Customer Base

Etherstack has a globally diversified base of high quality customers/End users across various industries



Australian Government  
Department of Defence



Royal Canadian  
Mounted Police

**Rockwell  
Collins**



Australian Government  
Department of Home Affairs



**THALES**

**GENERAL DYNAMICS**  
Mission Systems

**NEC**

**COBHAM**



**JVCKENWOOD**



MINISTRY OF DEFENCE



**CISCO**

**ATCO Electric**

**ICOM**

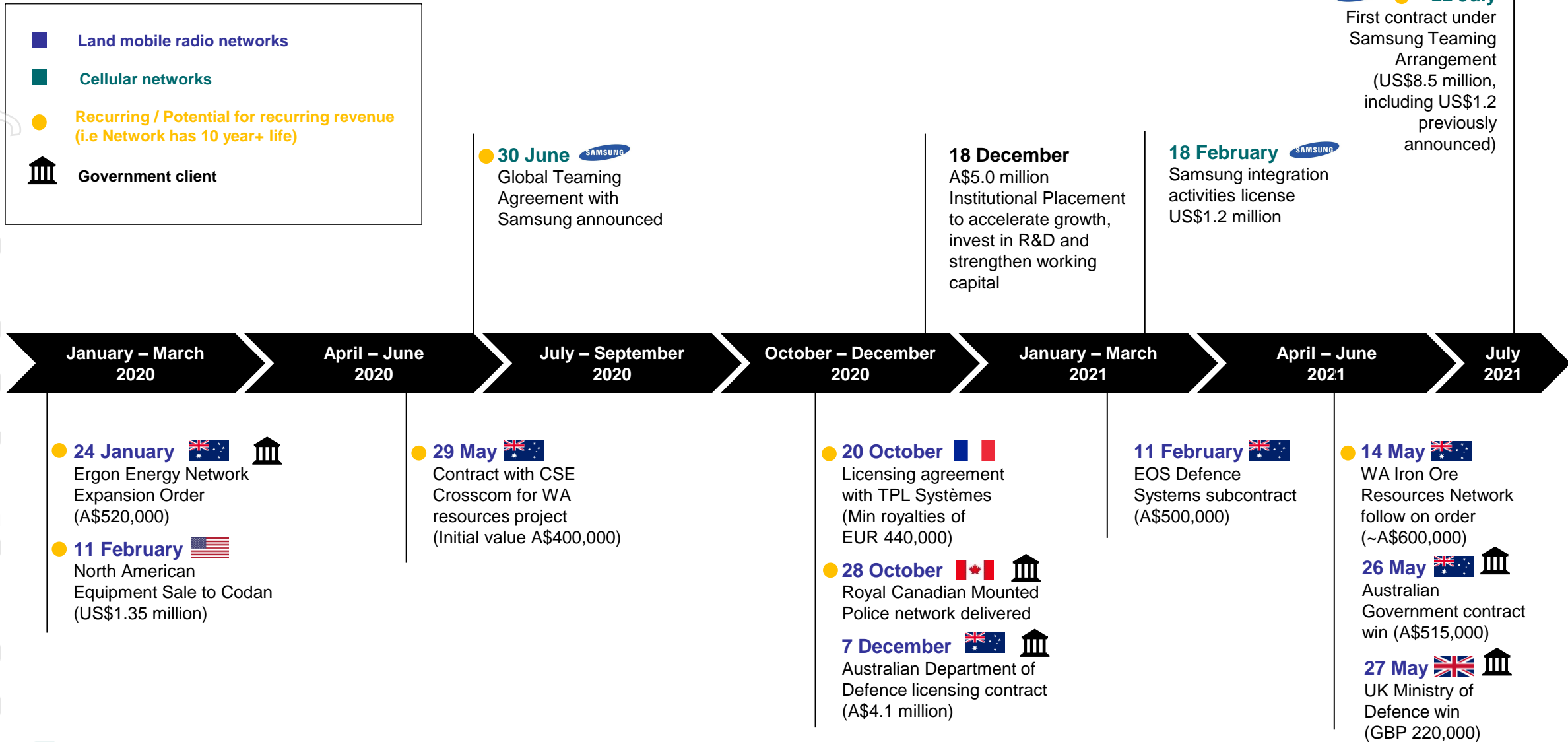


**FirstEnergy**



**Jersey Central**  
Power & Light  
A FirstEnergy Company

# Key Developments Timeline





# Etherstack 1H 2021 Guidance

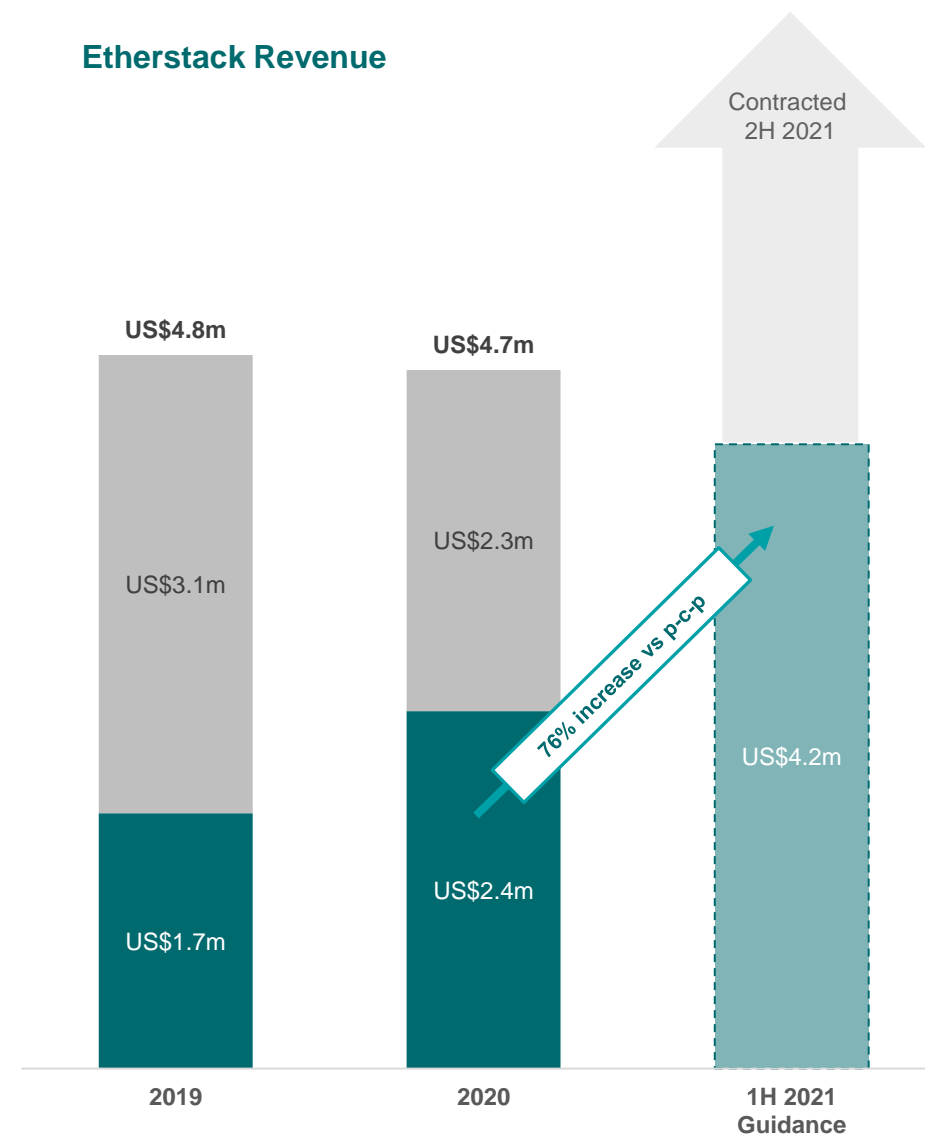
## 1H 2021 Revenue Guidance

- Etherstack provided a trading update on 6 July 2021, announcing revenue guidance for the half year ending 30 June 2021 to be US\$4.2m
- Half year 2021 revenue of US\$4.2m represents a 76% increase against p-c-p
- It is not expected that any revenue from the contract announced with Samsung Electronics today will be recognised in the first half of 2021 i.e. significant underlying growth in Etherstack's traditional business, excluding Samsung

## 2H 2021 Outlook

- Etherstack has achieved contracted revenue for 2H 2021 of US\$4.2m, comprised of:
  - USD \$3.0m in contracted revenues not associated with Samsung teaming agreement
  - USD \$1.2m of Samsung related revenue announced in February 2021, expected to be recognised in 2H FY2021
- In addition, the company expects further 2H 2021 project wins and revenues from other parts of its business, such as defence, equipment sales and technology licensing

## Etherstack Revenue



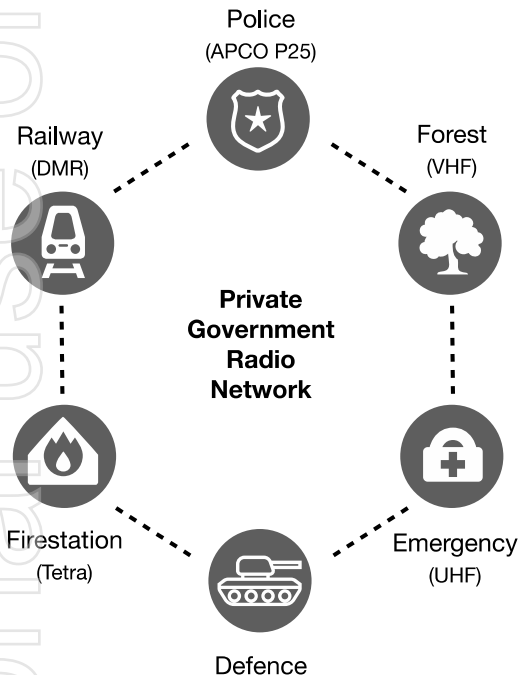
# CELLULAR NETWORKS (4G & 5G ) (MISSION CRITICAL PUSH TO TALK OVER LTE)

# Evolving public safety communications – hybrid networks

Etherstack's software enables interoperability between traditional and new 4G & 5G networks for public safety communications.

## TODAY

Terrestrial Digital Radio Network



## 5G MIGRATION

Hybrid, telco carrier based public safety mobile broadband



## Mission Critical Push To Talk (MCPTX) over LTE

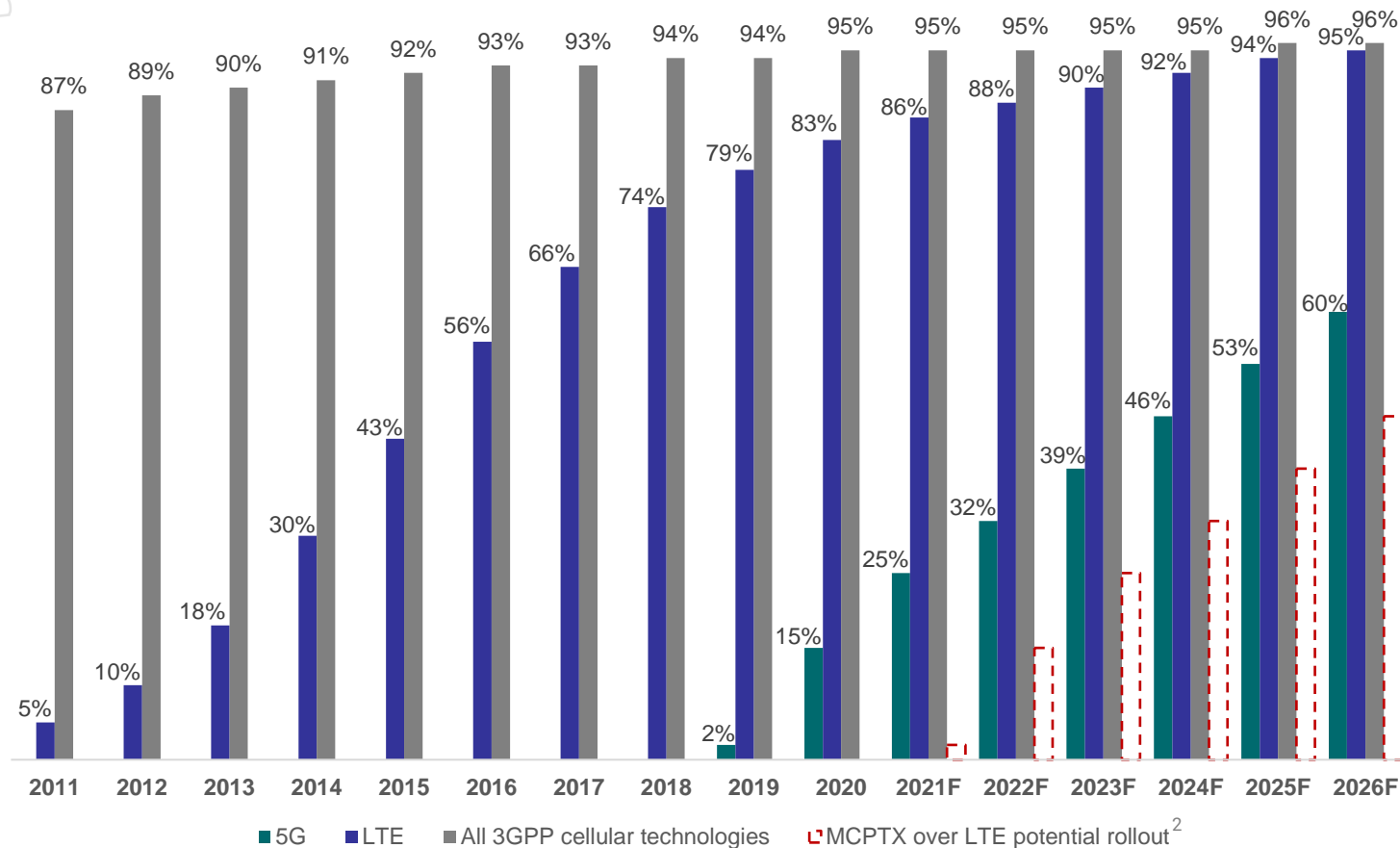
- Availability of new wireless technologies (wifi, 4G & 5G) is transforming public safety communications
- Traditional digital radio (VHF& UHF) networks are still essential – these being the networks used by police, firefighters, ambulance and electric utility personnel today. Governments today spend billions of dollars on these types of networks. These are 15 – 20 year infrastructure projects
- Interoperability between new and existing networks is key to enabling a smooth transition to newer technologies, without disrupting current service capabilities
- Etherstack technology enables interoperability within and between, traditional (digital radio and new (4G & 5G) networks for MCPTX public safety communications
- Etherstack entered into a Global Teaming Agreement with Samsung in June 2020 to deliver this solution to telecommunications carriers



# Rollout of new communications technologies – migration

Global rollout of 5G networks is expected to drive demand for Etherstack MCPTX over LTE technology in coming years

Mobile Population Coverage (%) by Technology<sup>1</sup>



- 5th generation mobile network (5G) delivers higher peak data speeds, ultra low latency, and more reliability
- 5G is used across three main types of services: enhanced mobile broadband, mission-critical communications, and the Internet of Things
- 5G network coverage expected to grow from ~15% of global population in 2020 to ~60% in 2026
- National carriers are expected to provide guaranteed public safety communication capacity to public safety agencies in each country
- As a result, demand for Etherstack's MCPTX over LTE technology, is expected to rise significantly over next 36 – 48 months



# Targeted Contracts Going Forward

Etherstack is targeting 25+ contract wins over the medium term

*Etherstack targeted additional contract wins under teaming agreement*



- Samsung's telecommunications client will be the first carrier to roll out a 5G network incorporating Etherstack's MCPTX related software elements
- Each incremental network provides Etherstack with upfront licensing and deployment revenues, as well as long term support revenue tails, as is common with essential communications infrastructure projects
- Etherstack and Samsung are currently actively involved in multiple carrier pursuits globally to roll out the combined MCPTX solutions into 4G / 5G networks
- Etherstack management is targeting 25+ contract wins over the medium term

# Cellular Networks: Etherstack Market Opportunity

Contracts available for competition



**60 – 90**

*in OECD countries over ~5 years<sup>1</sup>*

Upfront licensing fee potential



**US\$2 – 8m**

*Typically per contract*

Long term recurring revenue stream



**High Margins**

*comparable to enterprise SaaS peers*

Etherstack target addressable market



**US\$250 – 750m**

*Upfront licensing fees in OECD and other near target countries<sup>1</sup>*

Key market participants



**Samsung (Etherstack's partner), NSN, Ericsson, Huawei & NEC**  
*with national 5G deployment network rollout capabilities*

Non-OECD contracts for competition



**100 – 200**

*over next 5 – 10 years<sup>1</sup>*

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# DIGITAL LAND MOBILE RADIO NETWORKS



# Digital LMR Networks

Etherstack has deep experience delivering software based digital land mobile radio networks across public safety, utilities, resources and transportation industries

- Digital Land Mobile Radio (**LMR**) networks typically used in public safety, utilities, transportation and resources sectors
- **Public Safety** – Digital LMR networks used by first responders for day-to-day operations and in times of emergency. Network is mission critical infrastructure for the success of operations. These contracts are commonly Government backed
- **Utilities, Resource & Transportation** – Digital LMR networks used by industry for essential services and high safety hazard environments to enable rapid and reliable communication across the network
- Typical lifespan of networks is 10 – 15 years (which in turn generates long term support revenues)
- Typical Etherstack networks deployment deals generate US\$1 – 8m in upfront licensing fees, followed by support and other recurring revenues often ~15 – 20% p.a. of upfront fees





# Case Studies

## Royal Canadian Mounted Police

The Royal Canadian Mounted Police (RCMP) are the federal and national police service of Canada, providing law enforcement at the federal level

**November 2019** – Etherstack contracted for delivery, commissioning and on-going support of a secure encrypted digital radio network spanning 26 sites



### Key details

- Initial order value CAD\$1.7 million
- RCMP network will be Etherstack's second largest network in Canada (after 82-site ATCO Electric network in Alberta)
- Etherstack successfully delivered and commissioned initial digital radio network for the RMCP within the Arctic Circle as at November 2020
- Recurring SaaS-like support revenues expected at 15 – 20% pa

### Engagement from Etherstack engineers globally to deliver

- Etherstack engineers in Canada, Australia, Japan, UK, and US were involved in the solution delivery

### Additional tranches

- Additional sites expected in 2021 & 2022
- Management expects long term support revenues to commence in Q3 2021 and believe will likely continue for a further 15 years

## Western Australia Iron Ore Network

Large resources projects require essential communications for operations and safety in hazardous environments. Operations would cease without 100% continuous communications, hence the need for "government grade" communications systems.

**May 2020** – Etherstack's subsidiary, Auria Wireless, entered into a contract with CSE Crosscom, to use Etherstack software to deliver the first stage of a multi-stage P25 digital LMR network project to CSE Crosscom's mining client

### Key details

- Initial order value A\$400,000
- End user is a major mining company with activities in Pilbara region, WA
- Recurring SaaS-like support revenues expected at 15 – 20% pa

### May 2021 – Follow-on order

- Follow-on order expected to generate A\$600,000
- A third expansion order is expected later in 2021, or early 2022

### Additional tranches

- Completion of deployment and network commencing live communications will signal start of recurring support opportunity
- Potential to rollout to many of client's 50+ other mining sites globally over the next 10 years as existing networks renewed

# Market Snapshot

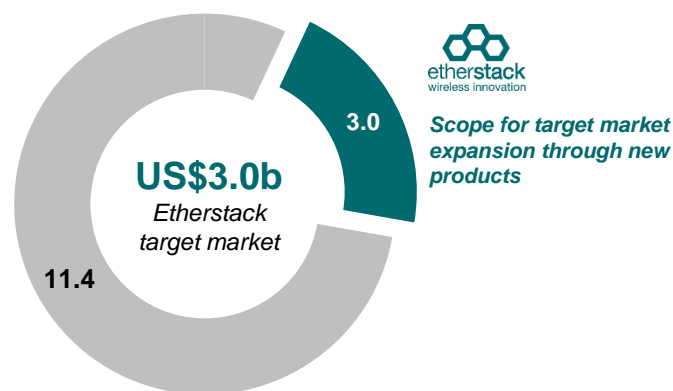
## US\$14.4b

Value of global critical communications market in 2020

## 6.7%

Forecast CAGR of the global critical communications market from 2020 - 2027

### Etherstack Target Market (US\$b)<sup>2</sup>



- The global market for critical communications was estimated to be US\$14.4b in 2020<sup>1</sup>
- The global critical communications market is forecasted to grow at a CAGR of 6.7% from 2020 to 2027, to reach a value of US\$22.7b<sup>1</sup>
- Global growth over the next 7 years in the critical communication market is expected to be driven by the defence, public safety and transport industries<sup>1</sup>
- Within the global market for critical communications, Etherstack currently targets network contracts valued between US\$0.5 – 20.0m in upfront revenues
- Typically engagements result in support and other recurring revenues worth ~15 – 20% p.a. of upfront fees following deployment
- Significant market opportunity exists for growth in target contract size and volume as Etherstack grows
- Delivery of larger networks typically require in-country prime contractor partners currently

Notes: 1. Critical Communication – Global Market Trajectory & Analytics, Research and Markets 2. Management estimates.

# Digital LMR Networks: Terrestrial Market Opportunity

Scores of target sized contracts  
available for competition



**150 – 250**

*in target regions annually<sup>1</sup>*

Etherstack target  
network contract size



**US\$0.5 – 20m**

*per contract*

Etherstack target  
addressable market



**US\$3.0b**

*addressable network deployments  
annually<sup>1</sup>*

Limited market participants



**Less than 10 major  
manufacturers globally**

*extraordinarily high technical and commercial  
barriers to entry, with market dominated by a  
handful of very large players*

Recurring revenue growth



**31%**

*Support revenue CAGR  
over the past 5 years*

Recurring support revenues



**15 – 20%**

*of upfront deployment fees annually<sup>1</sup>*



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# SATELLITE NETWORKS



# Secure Push To Talk Communications over Satellite

Etherstack is ready to capitalise on emerging wireless communications opportunities made available by new low cost satellite technology



**US\$56.0b**

*Value of global satellite communications market in 2019<sup>1</sup>*

**9.2% CAGR**

*Global satellite communications market CAGR from 2019 – 2027<sup>1</sup>*

- Advances in satellite technologies has seen an unprecedented number of satellites launched in the past 12 – 24 months
- Explosion in satellite bandwidth availability and lower costs to operate driving satellite communications costs (tariffs) down
- Etherstack has been developing secure push to talk (PTT) over Satellite solutions for the past 3 years and trialing them with pilot public safety customers in Australia, the US and Canada.
- Recently delivered a PTT over Satellite solution for a Canadian federal policing and security agency
- Etherstack is currently in discussions with well known satellite communications suppliers to incorporate Etherstack's technology into their networks

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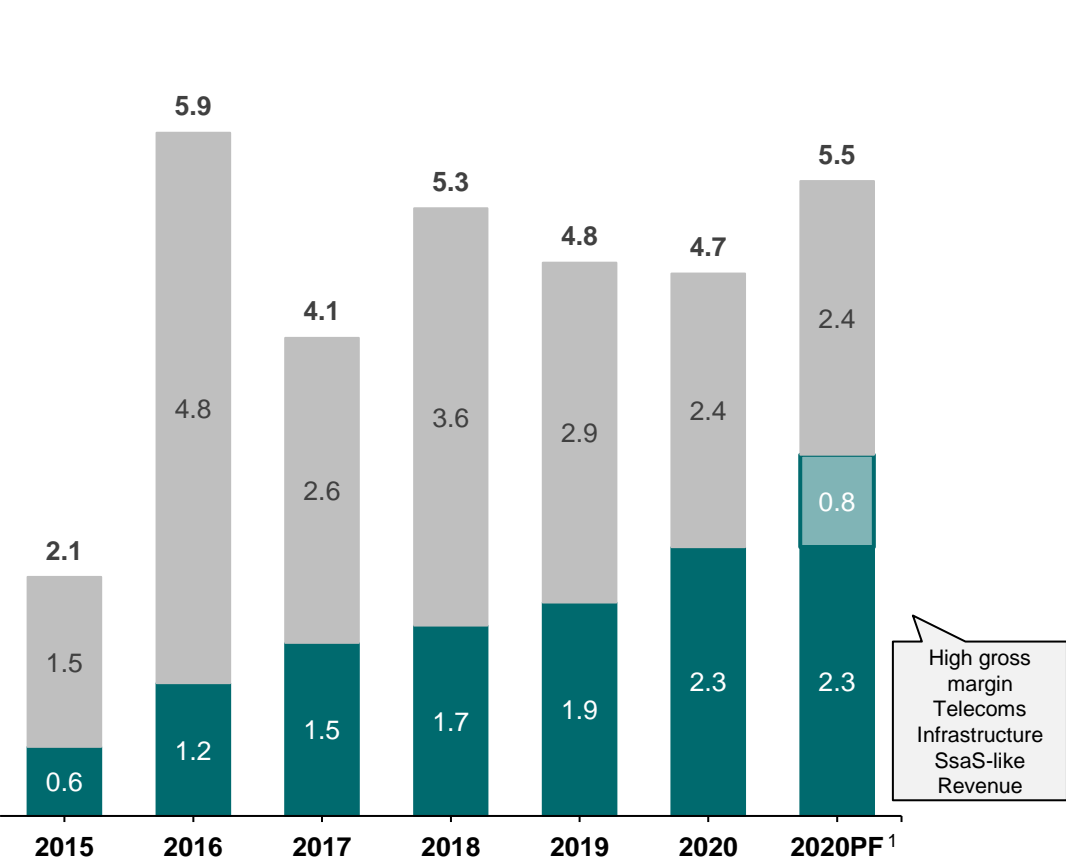
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# FINANCIALS

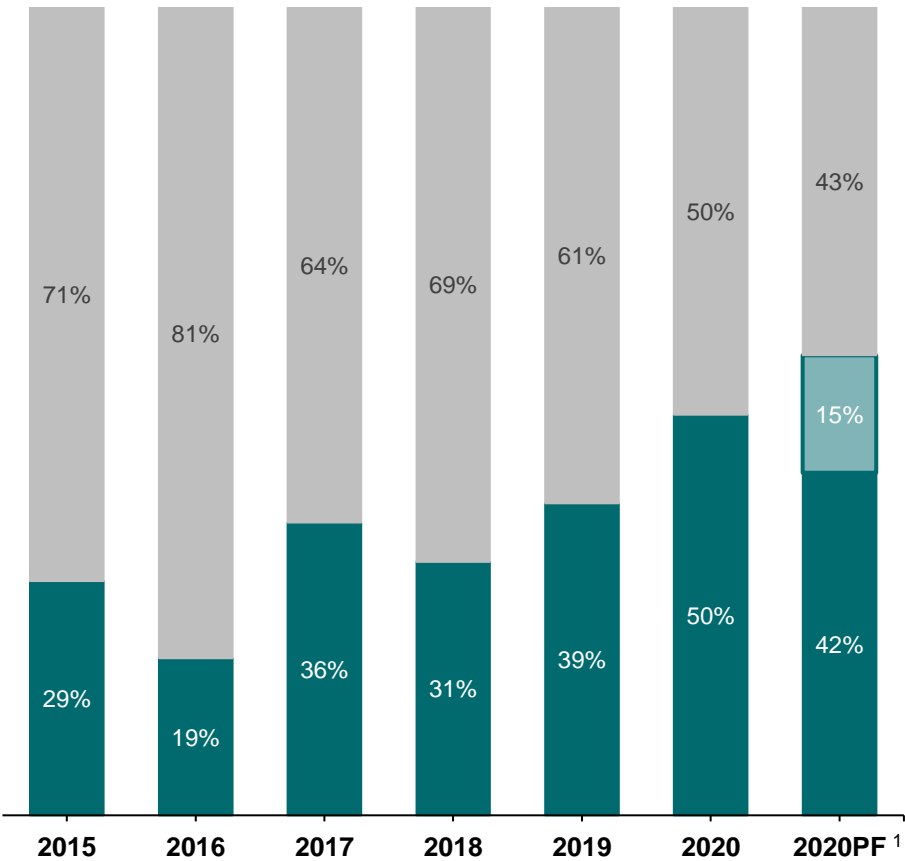
# Recurring Revenue

Etherstack recurring revenue has been steadily growing year on year

Revenue (US\$m)



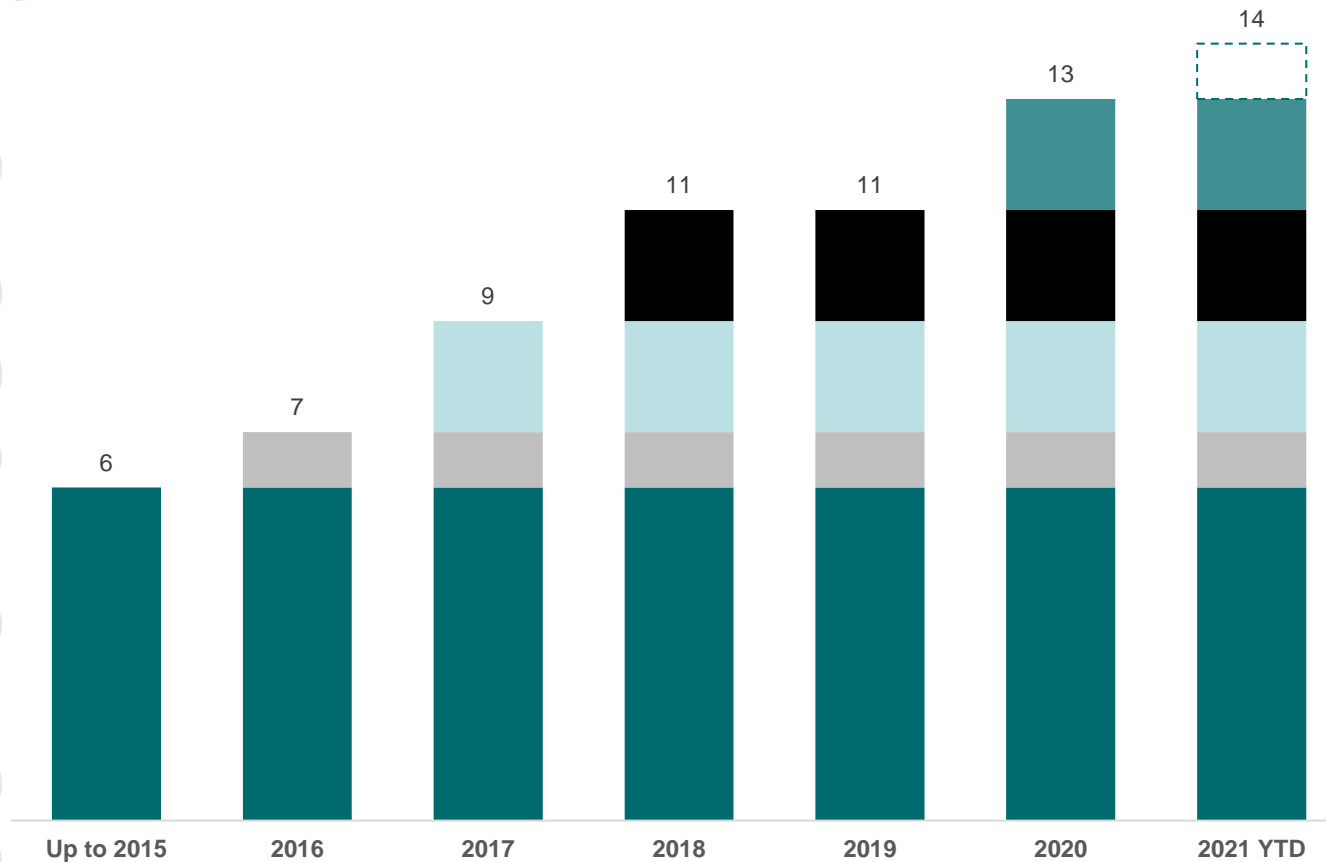
Revenue Composition



Notes: 1. Pro Forma adjustment of US\$0.8m recurring revenue in FY20 for the purposes of illustrating Samsung contract impact to revenue composition.

# Recurring Revenue Contracts

Number of support contracts



## Growing recurring revenue base driven by increasing number of support contracts

- Recurring revenues predominantly driven by support contract revenues, however also includes royalty revenues
- Support contracts are typically required for the life of a communications network
- Support contracts have a lifetime duration of ~10 – 15 years, and typically agreed at initial network rollout
- Customer retention rate is currently 100%
- Estimated Average Remaining Life of Networks: ~10 years



# Income Statement

US\$'000	2017	2018	2019	2020
<b>Revenue from Contract with Customers</b>	<b>4,142</b>	<b>5,264</b>	<b>4,792</b>	<b>4,699</b>
Recurring Revenue	1,508	1,682	1,838	2,331
Project and Product Revenues	2,634	3,582	2,954	2,368
% Recurring Revenue to Total Revenue	36%	32%	38%	50%
Cost of Sales	(1,857)	(1,668)	(1,507)	(2,032)
<b>Gross Profit</b>	<b>2,285</b>	<b>3,596</b>	<b>3,285</b>	<b>2,667</b>
Gross Margin	55%	68%	69%	57%
Other Income; R&D & Government Incentives	97	102	100	125
Other Overheads	(2,290)	(1,835)	(2,292)	(1,712)
<b>EBITDA</b>	<b>92</b>	<b>1,863</b>	<b>1,093</b>	<b>1,080</b>

## EBITDA positive operations supported by steadily growing recurring revenues

- Revenue guidance for the first half of financial year 2021 is US\$4.2m, which represents a 76% increase against p-c-p
- Etherstack gross profit margins vary depending on the mix of Etherstack product (relatively high margin) vs third party product (relatively low margin)
- Gross profit margin lower in 2020 due to changes in the revenue mix, which may vary year to year depending on substantial contracts delivered in the period

# Balance Sheet & Cash Flow Statement

## Balance Sheet

US\$'000	31-Dec-19	31-Dec-20
Cash and cash equivalents	931	4,180
Trade and other receivables	1,870	1,410
Other current assets	247	446
Intangibles	3,295	3,516
Other non-current assets	119	552
<b>Total assets</b>	<b>6,462</b>	<b>10,104</b>
Trade and other payables	2,467	2,760
Deferred revenue	1,332	1,744
Borrowings	1,262	572
Convertible notes	1,417	233
Other liabilities	604	699
<b>Total liabilities</b>	<b>7,082</b>	<b>6,008</b>
<b>Net assets</b>	<b>(620)</b>	<b>4,096</b>

## Cash Flow Statement

US\$'000	2019	2020
Net cash generated from operating activities	1,364	1,733
Net cash flow (used in) investing activities	(1,223)	(1,470)
Net cash flow (used in) financing activities	739	2,901
<b>Net increase/(decrease) in cash</b>	<b>880</b>	<b>3,164</b>
Effect of foreign exchange rate changes	-	85
Cash and cash equivalents at start of period	51	931
<b>Cash at end of period</b>	<b>931</b>	<b>4,180</b>

## Strong balance sheet position a foundation to invest in growth

- Estimated cash and receivables at 30 June US\$4.8m (~US\$2.4m cash balance + US\$2.4m receivables due July 2021)
- Remaining outstanding convertible notes were converted in March 2021 into equity
- Operating cash flows consistently positive even throughout COVID-19 pandemic
- Continued investment into intellectual property builds on Etherstack's competitive advantage

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# FUTURE MILESTONES

# Summary

## Key operational milestones achieved by Etherstack leading up to 2021

- April 2019 – New radio network contract for public safety and emergency services personnel in the State of Idaho
- June 2019 – Order from the US State Department & supply contract with an Australian state police force
- October 2019 – Order from Australian energy utility for equipment and software at 18 new sites
- November 2019 – Etherstack wins Federal Police Digital Radio Network in Canada
- May 2020 – Etherstack enters contract with CSE Crosscom
- **June 2020 – Etherstack signs Global Teaming Agreement with Samsung for 4G/5G Public Safety**
- October 2020 – Etherstack signs licence agreement with TPL Systèmes
- November 2020 – Etherstack signs \$4.1m first stage Australian Defence Contract

## Strong outlook for 2021 and going forward driven by focus on key strategic initiatives:

- ✓ Supply of MCPTX over LTE solution for first 5G networks under Samsung Teaming Arrangement
- ✓ Progress towards 2nd stage of Western Australia resources project and grow resources sector clients base
- Procure initial contracts with satellite network terminal providers to incorporate Etherstack technology into their network solutions
- Expansion of existing Australian & International public safety networks
- License and supply of defence communications solution to other nations
- Commencement of upgrades to virtualised switching solutions across installed base
- Supply of MCPTX over LTE solution for additional 4G / 5G networks under Samsung Teaming Arrangement





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