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## PRESENTATION SLIDES ON ADDVALUE'S BUSINESS TRANSFORMATION, GROWTH AND PROSPECTS SHARED WITH SOME ANALYSTS

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The Board of Directors (the “**Board**”) of Addvalue Technologies Ltd (the “**Company**” and together with its subsidiaries, the “**Group**”), in ensuring the parity of information, hereby inform that the Company had at noon on 27 April 2022 shared the attached presentation slides concerning the growth drivers and business prospects of the Group with some analysts. Therein, it was stated that, based on the said growth drivers and business prospects, the Group is highly confident and optimistic about its performance for the next 12 months, particularly with regard to its IDRS-Related Business and ADRS-Related Business with an order book of US\$5.5 million, which barring any unforeseen circumstances, is expected to be fulfilled within the current financial year and that we have also secured our 9<sup>th</sup> IDRS customer.

***Some of the statements contained in the presentation slides constitute ‘forward-looking statements’ that do not directly or exclusively relate to historical facts. These forward-looking statements reflect our current intentions, plans, expectations, assumptions and beliefs about future events and are subject to risks, uncertainties and other factors, many of which are outside our control and may affect the extent of the realization of our prevailing and/or indicative orders for FY2023 and beyond. Important factors that could cause actual results to differ materially from the expectations expressed or implied in the forward-looking statements include known and unknown risks and factors such as general economic and business conditions, including the uncertainties arising from the current ongoing Ukraine war; disruption to the global supply chains, components shortages, particularly, semi-conductors, escalation of the global Covid-19 pandemic situation as well as other political and economic issues confronting the world; deflationary pressures and undue currency movements; change in technology; delay in signing, commencement, implementation and performance of programs, or the delivery of products or services under them or the implementation of improved airtime package by the satellite operators; structural change in the satellite industry; relationships with customers; competition; and the ability to attract quality personnel. Because actual results could differ materially from our intentions, plans, expectations, assumptions and beliefs about the future and any negative impacts arising from these issues will affect the performance of the Group’s businesses, undue reliance must not be placed on these statements.***

### BY ORDER OF THE BOARD

Dr Colin Chan Kum Lok  
Executive Chairman  
27 April 2022

# Analysts Briefing Session

27 April 2022



ADDVALUE

# Corporate Purpose and Vision

- **Corporate Vision**

**“Be a world changer in the business of connectivity”**

- **Corporate Purpose**

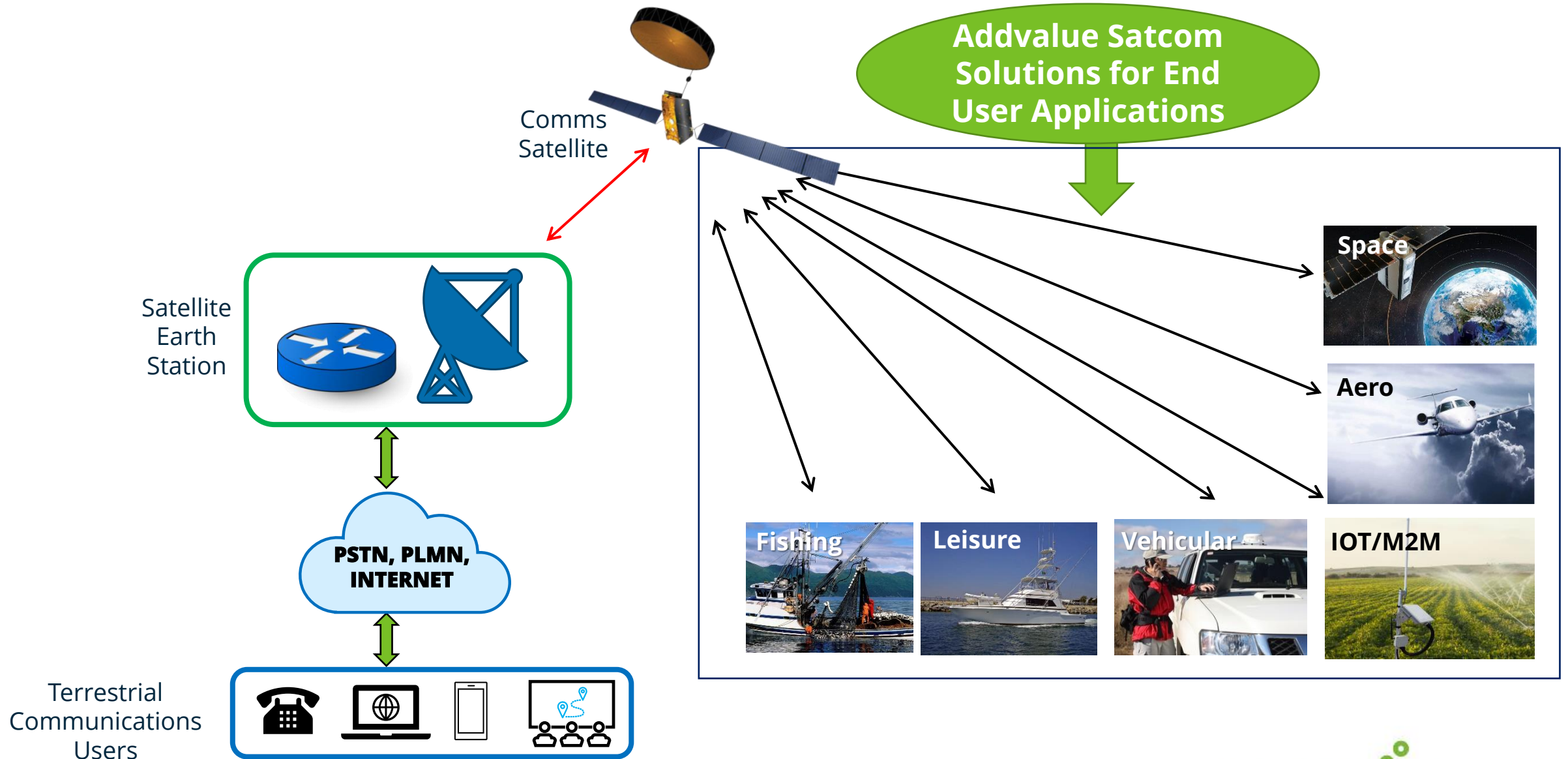
**“We enable companies to unleash their real business potentials by harnessing the products and services offered by us.”**

- **Motto:**

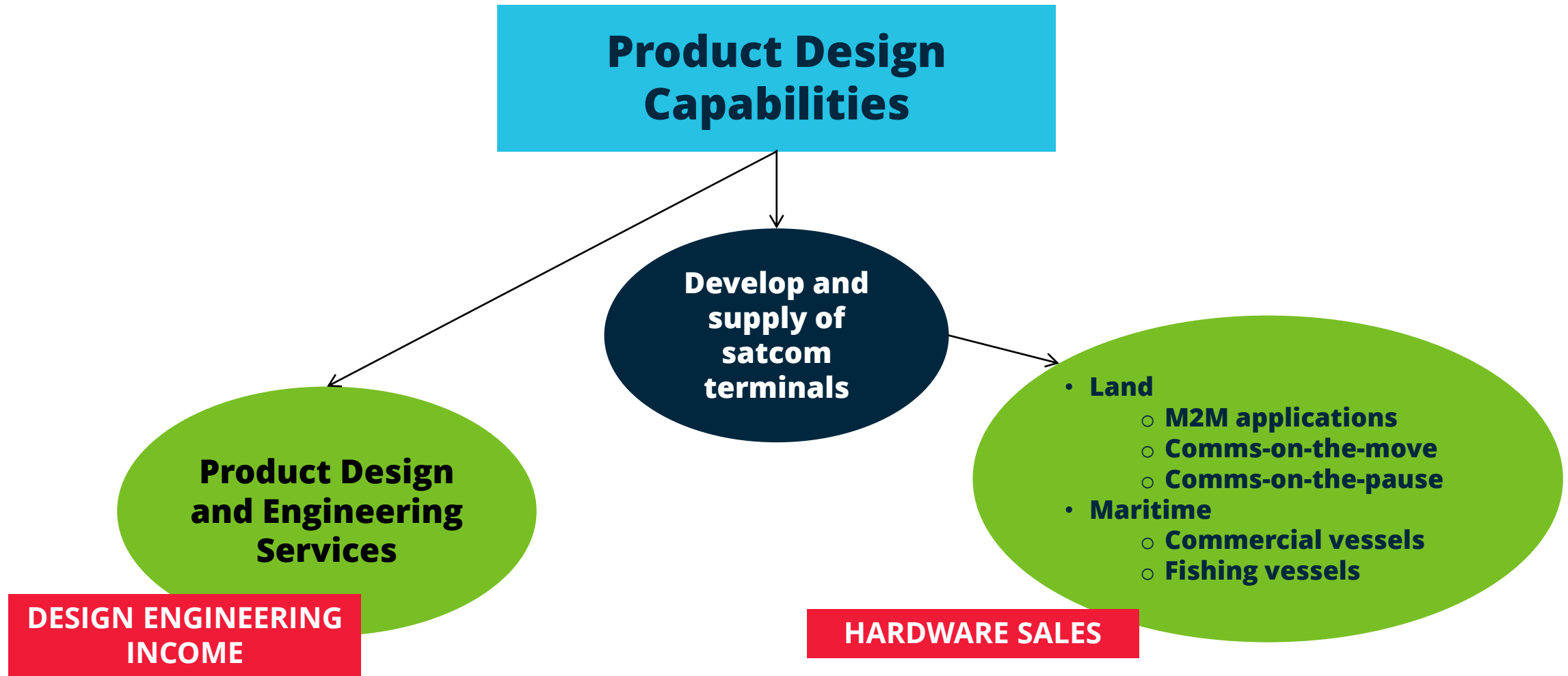
**“Trusted partner in the business of connecting the world”**

**“Liberating Communications, Driving Connectivity”**

# Connectivity Solutions for End Users' Applications

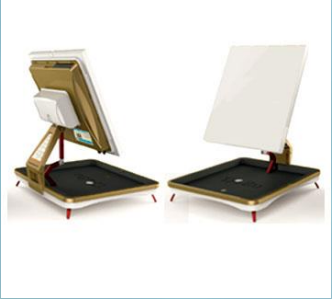


# Traditional Business Model



# Solutions built for use anywhere on land

## PORTABLE



## VEHICULAR



## M2M

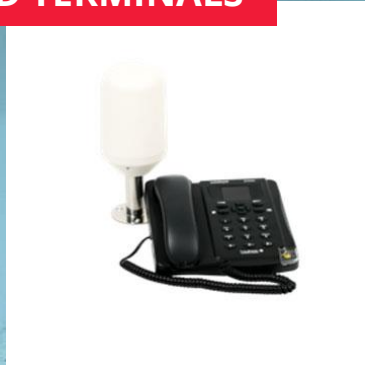


# Solutions built for use at sea

## BROADBAND TERMINALS

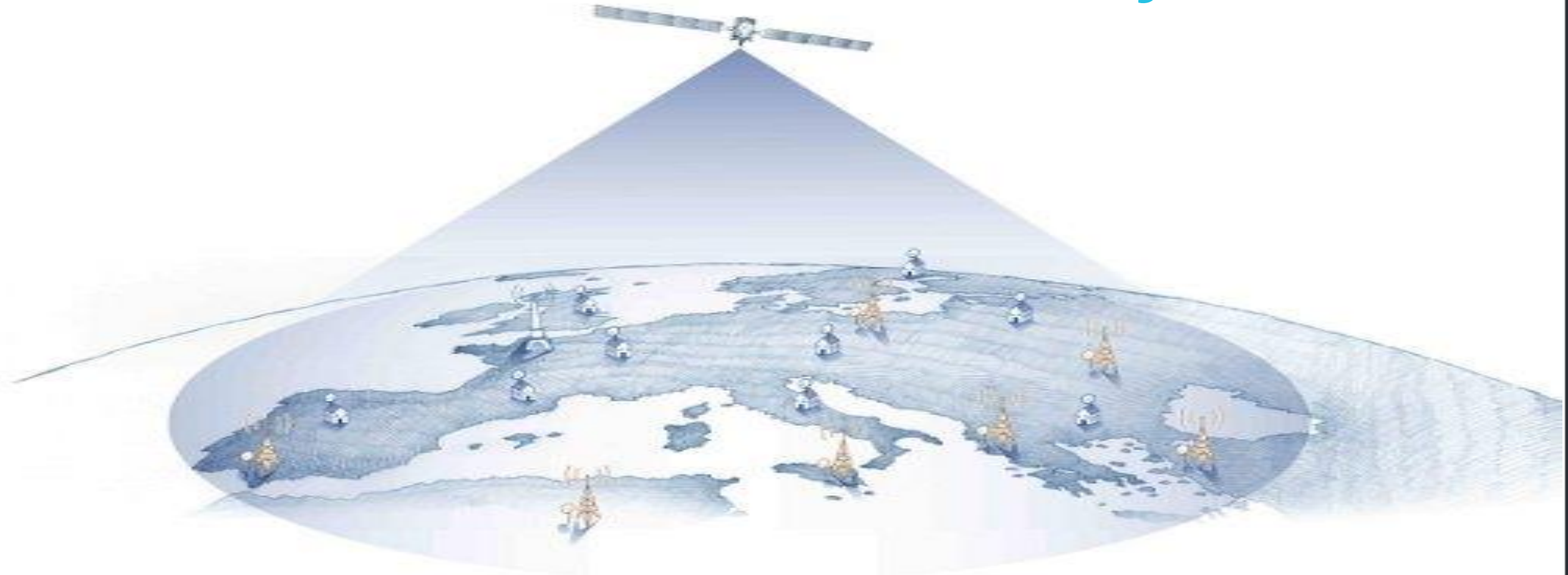


## NARROW BAND TERMINALS



# Satcom-based Internet of Things (IoT) = "IoE"

**Extending Internet of Things connectivity beyond the limitations of terrestrial network = Internet of Everywhere**





# Driving forces in the Digital Economy (“IR 4.0”)

- **Data:**

“Data science and analytics”  
“ AI inference at the edge”

- **Connectivity:**

“5G Terrestrial Network and interoperability with Satcom technologies”

- **Customers:**

“Quest for insatiable needs for Speed, Situation awareness (with data insights) ”

*Data-insight + Ubiquitous and Seamless Connectivity  
=> Disruptive innovations and limitless business potential*

# Addvalue's Digital Connectivity as a Solution (DCaaS)

- Aerospace Solutions
- IDRS for LEO satellite communication
  - Unmanned Aerial Vehicle
  - Aircraft safety services



- Agile Communications and AI Inference at Edge for Defense and Enterprises



- Environmental Monitoring Solutions
- Weather monitoring
  - Disaster Response



- Fishing Fleet Solutions
- Vessel Monitoring System
  - Operational Enhancements



- Industrial IoT Solutions
- Smart Agriculture

# Our Business Transformation Journey

Recalibrate our satellite communication business to focus on end-user solutions

Re-align our embedded system knowhow and comm product development capabilities for high-value engineering domains

Pivot to “solution-focus” satcom applications in situation awareness and Industrial IoT.

Apply our Inmarsat BGAN technology for space connectivity and also build up technical capabilities for space resilient hardware .

Harness FPGA technologies to develop Software Defined Radio or AI inference applications

Leverage off our unique “one-stop-shop” product development capabilities to attract high-value engineering contracts for product design and supply

- One-stop shop to supply terminals, airtime service and situation-aware solutions
- Managed services for recurring revenues

- High-end military and enterprises markets in SDR and edge-computing
- Revenue from product development services followed up with supply revenue of such proprietary products

# Our 4 Revenue Pillars After Business Transformation

Recalibrate our satellite communication business to focus on end-user solutions

Re-align our embedded system knowhow and product development capabilities for high value engineering domains

## Satcom Connectivity(STC) [formerly IPS]

- Develop solutions for fishing fleets and provide terminal embedded with VMS solution for fisheries regulations.
- End-to-end satcom IoT/M2M solutions for environment, utilities, mining markets.

## Space Connectivity(SPC) [formerly IDRS]

- IDRS is a game changer to data communication in LEO satellite industry.
- Provide end-to-end real-time, always-on data communications for LEO satellite operators on global basis.

## Advanced Digital Radio (ADR) [formerly RES]

- Develop advanced embedded solutions based on state-of-the-art FPGA SoC technologies
- Made foray into Software Defined Radio ("SDR") markets and advanced data computing at edge.

## Design Engineering Services (DES)

- Provide third-party product development services.
- Create new opportunities for design and supply revenue.

# Diversified Revenue Streams

	Revenue Segments	Hardware sales	Airtime, value-added solution subscriptions	(4) Design and Engineering services (DES)
1	Satcom Connectivity (STC)	✓	✓	✓
2	Space Connectivity (SPC)	✓	✓	✓
3	Advanced Digital Radio (ADR)	✓		✓

# Space Connectivity Solutions

A satellite is shown in orbit above the Earth. The satellite has a central body with various instruments and a large parabolic dish antenna. It is connected to two long, rectangular solar panel arrays. The Earth's surface is visible below, showing clouds and landmasses. The background is a deep blue space with some light rays.

Addvalue's IDRS solution is  
**THE WORLD'S FIRST**  
communications system relayed through a GEO  
satellite constellation system for commercial  
Low Orbit Earth ("LEO") satellite operators

**TRADITIONAL**

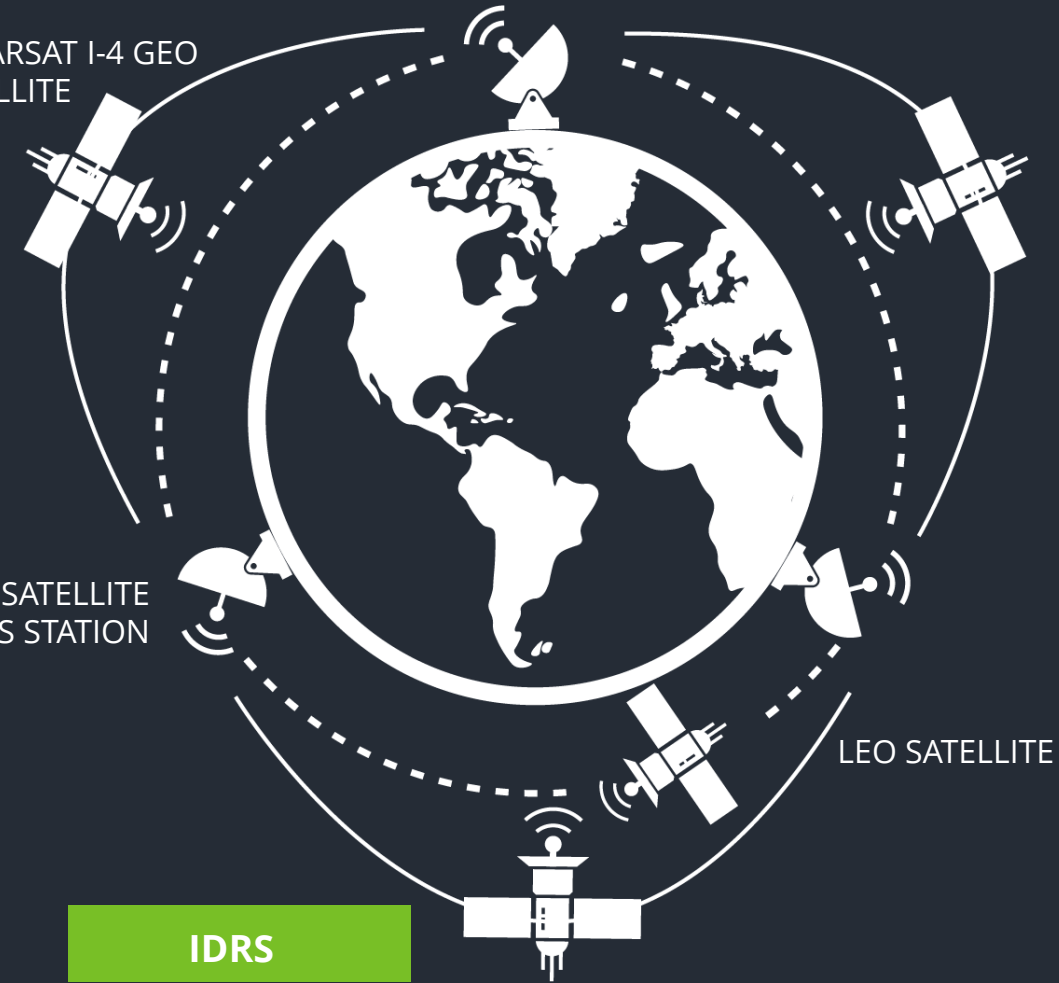
GROUND STATION



LEO SATELLITE

INMARSAT SATELLITE  
ACCESS STATION

INMARSAT I-4 GEO  
SATELLITE



LEO SATELLITE

**IDRS**

**GLOBAL coverage**

Builds on use of INMARSAT-4 constellation

**GLOBAL connectivity**

Builds on use of BGAN ground infrastructure

# IDRS Applications & Benefits

**Global, real-time, always-on and up to 24/7/365 data relay service to LEO satellites supporting TT&C, Tasking, Key-holing, and Mission Data downlink**

## NEAR REAL-TIME TT&C

- Real-time management of anomalies to extend LEO life spans

## NEAR REAL-TIME TASKING/RE-TASKING

- Update of LEO tasking plan in real time
- Shortens time between order and delivery of images
- Surveillance missions; EO missions; Defence missions (responsive space)

## COMPLEMENTS THE NEED FOR GLOBAL GROUND INFRASTRUCTURE

- Support smaller and cheaper LEO missions that require near real-time data relay, previously not economically viable due to cost of ground infrastructure / services

## STREAMLINED CONSTELLATION MANAGEMENT

- Unified interface platform
- Simultaneous accessibility for the whole constellation

## NEAR REAL-TIME DELIVERY OF MISSION DATA

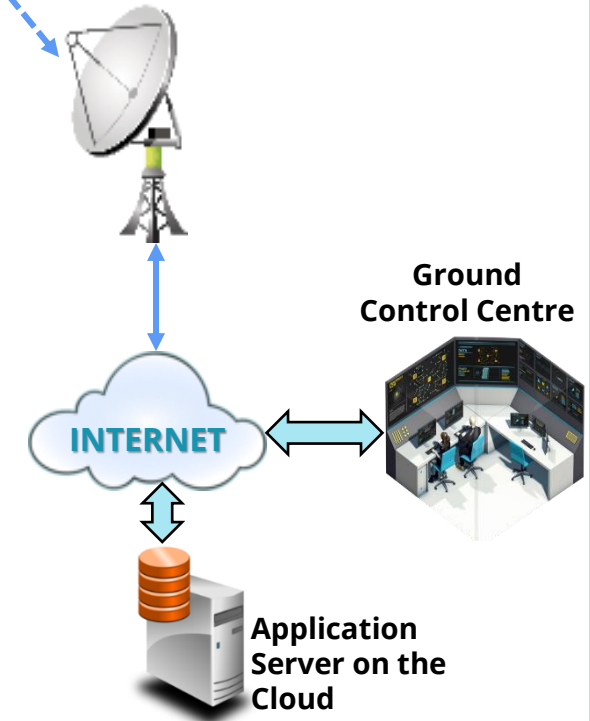
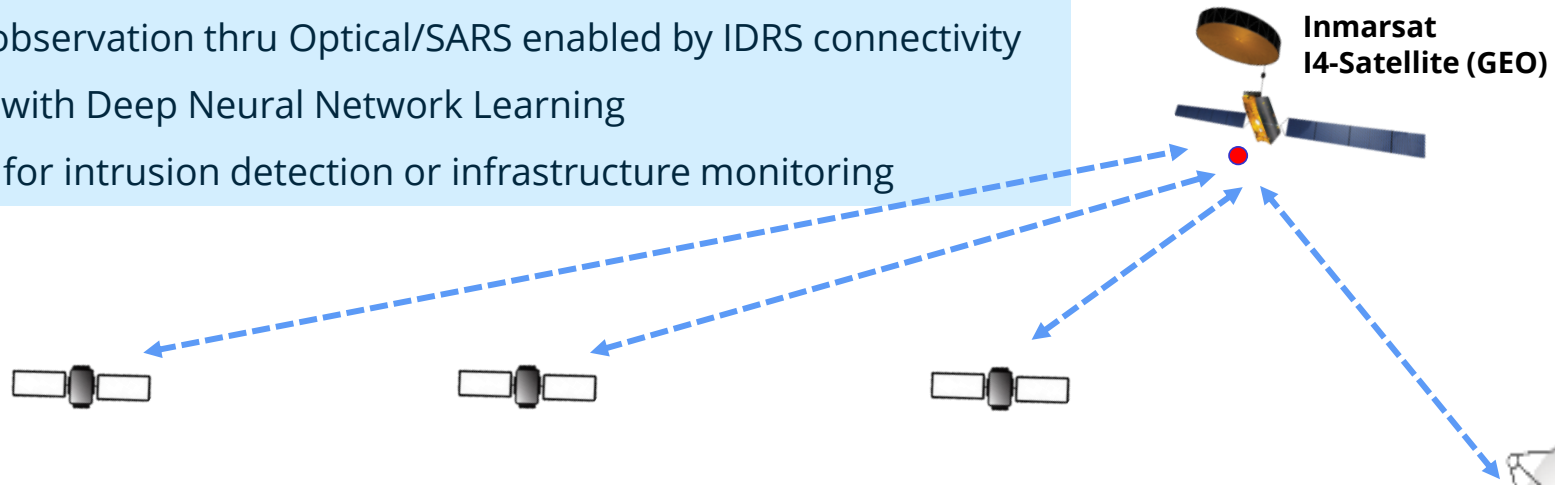
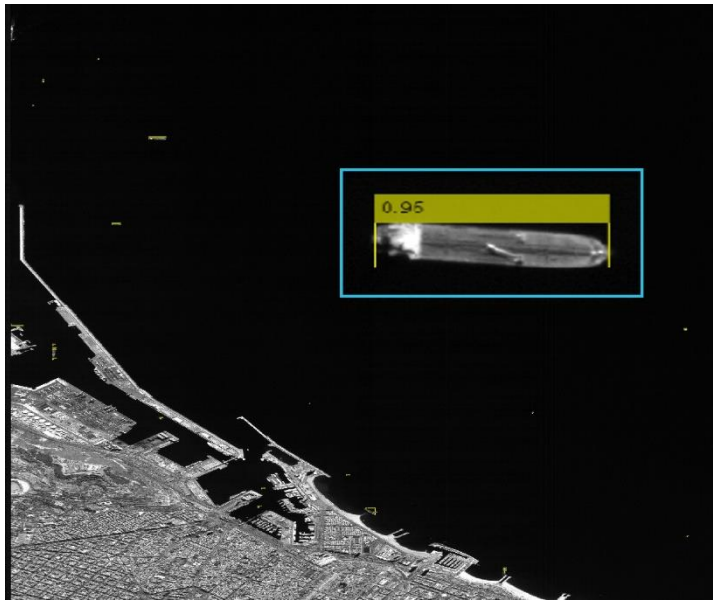
- Mission data “alerts” – real-time alerts of time critical observed events (Space / Earth observation).
- Surveillance missions, Defence missions (responsive space)
- Near real time delivery of low volume, high value data (weather, situational awareness data, AIS, ADS-B)
- Near real-time sampling & filtering of mission data – facilitates a significant increase in yield / improved data quality (Earth observation)



# Real-time Surveillance using IDRS

- Real-Time earth observation thru Optical/SARS enabled by IDRS connectivity
- Object detection with Deep Neural Network Learning
- Alert notification for intrusion detection or infrastructure monitoring

LEO Satellite  
(with Optical / SAR  
Imaging)



# IDRS Early Adopter: Capella Space



**REFER TO CAPELLA SPACE PRESS RELEASE DATED 25 APRIL 2022:**

***“CAPELLA SPACE CLOSES \$97M SERIES C FINANCING ROUND TO MEET EXPONENTIAL CUSTOMER DEMAND FOR ITS RADAR-POWERED, HIGH-QUALITY SATELLITE IMAGERY AND INTELLIGENCE.”***

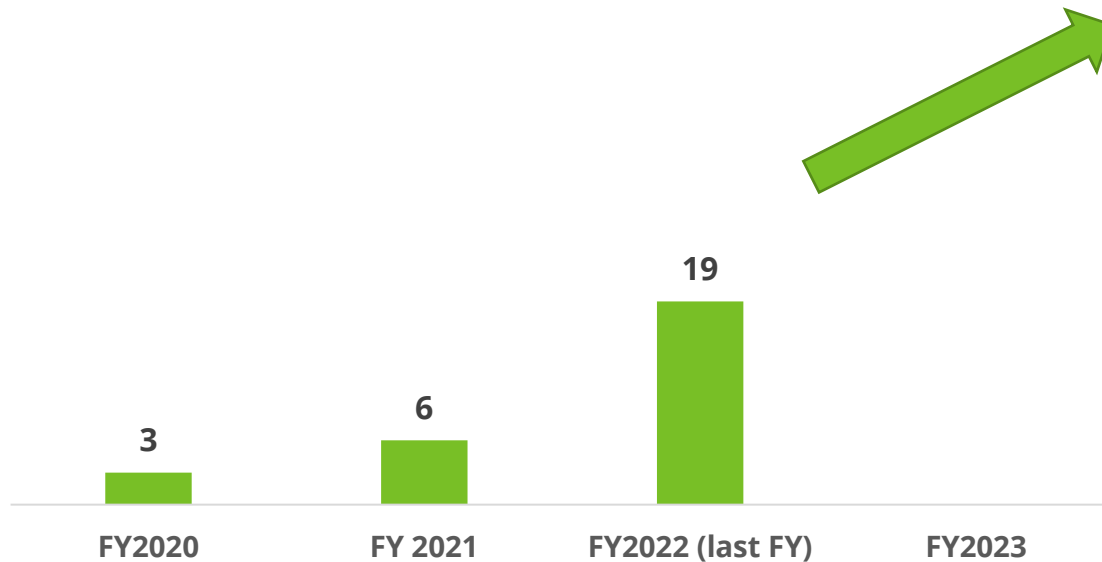
***“RECENT GLOBAL EVENTS IN UKRAINE AND RUSSIA HAVE SHOWN THAT ACCESS TO ACCURATE AND TIMELY EARTH OBSERVATION DATA HAS NEVER BEEN MORE CRITICAL.”***

- **IDRS PROVIDES REAL-TIME DATA CONNECTIONS ON ALL ITS 7 COMMERCIAL SATELLITES NOW IN SPACE**
- **CONTINUES TO LAUNCH MORE SATELLITES WITH IDRS ACROSS 2022 AND 2023**



# IDRS Terminal Delivery Trends

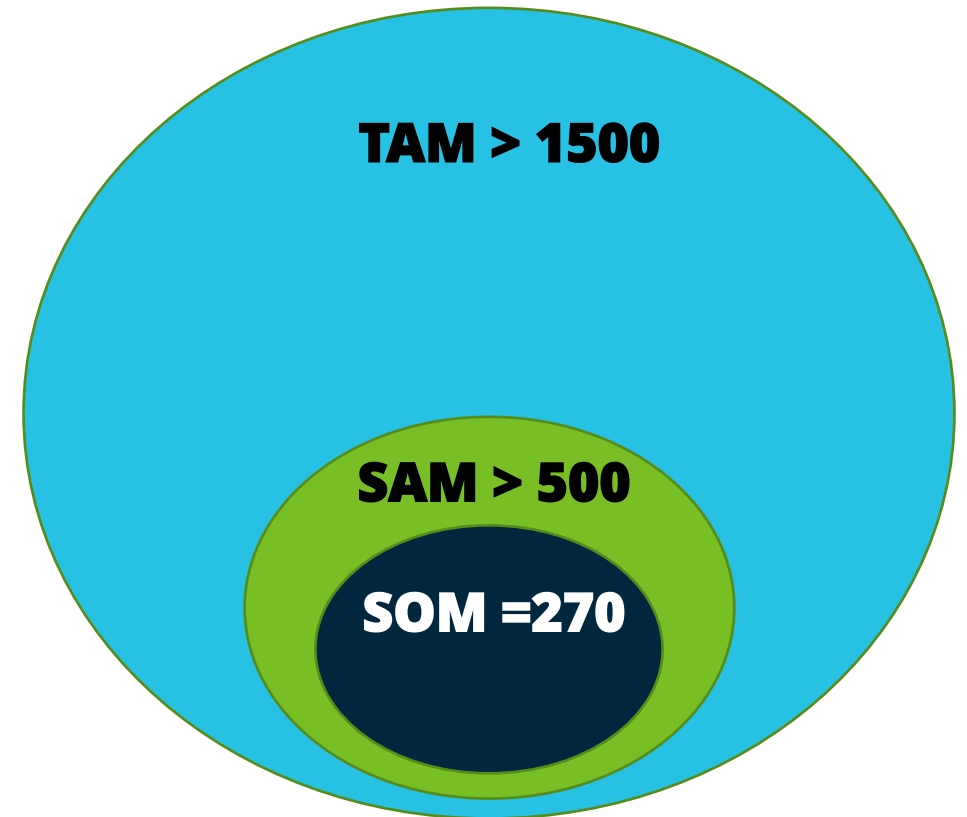
## No. of Deliveries



- ❖ 28 units delivered to date
- ❖ 6 units on order book to be delivered within this current Financial Year
- ❖ More repeat orders and new accounts expected
- ❖ Just secured another new IDRS customer
- ❖ To date 9 customers with a total planned constellations of 270 satellites

# Space Connectivity (SPC) – TAM SAM SOM for IDRS terminals and data services

- **Total Addressable Market (TAM) by our existing IDRS terminals within 5 years: >1500**
- **Serviceable Available Market (SAM) within 3 years: > 500**
- **Serviceable Obtainable Market (SOM)**
  - Secured 9 Customers with 270 combined satellites in planned constellations



Updated on 14th April 2022

\* Estimate based on current sale leads and projection



# Advanced Digital Radio Solutions

# Advanced Digital Radio (ADR) – Key Diverse Growth Drivers (formerly, Re-configurable Embedded System or “RES”)

## Highly Integrated Field Programmable Gate Array System-on-Chips (“FPGA SoC”) in high demand:

- **Software Defined Radio (“SDR”) Market**

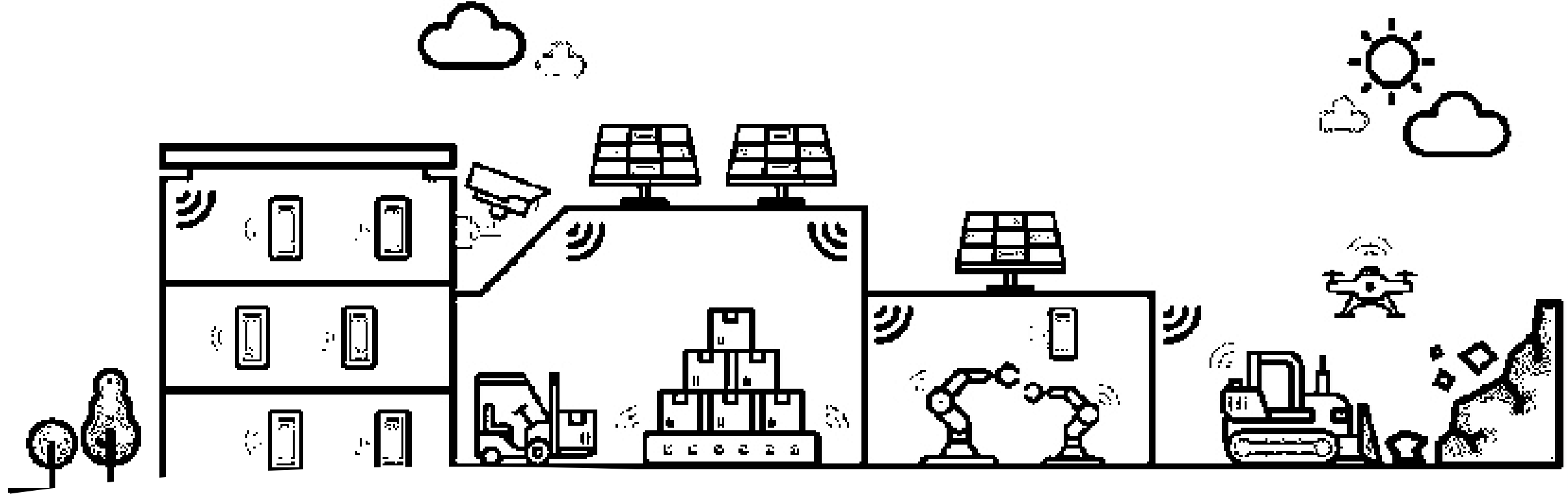
- Global SDR market size estimated at US\$20.4 billion in 2019\*
- Anticipated to grow at a CAGR of 8.7% p.a. from 2020 to 2027\* due to increasing need for agile radio driven by aerospace and defence industries

- **Edge Computing Market**

- Edge computing market valued at US\$1.75 billion in 2019+
- Expected to reach US\$8.29 billion by 2025 at a CAGR of 29.4% p.a. from 2020 to 2025+ as:
  - Enterprises across all industries are adopting digital innovations, such as artificial intelligence, data analytics & block chain, to drive performance

\*Based on Grand View Research – <https://grandviewresearch.com/industry-analysis/software-defined-radio-sdr-market>

+Based on Mordor Intelligence - <https://www.mordorintelligence.com/industry-reports/edge-computing-market-industry>

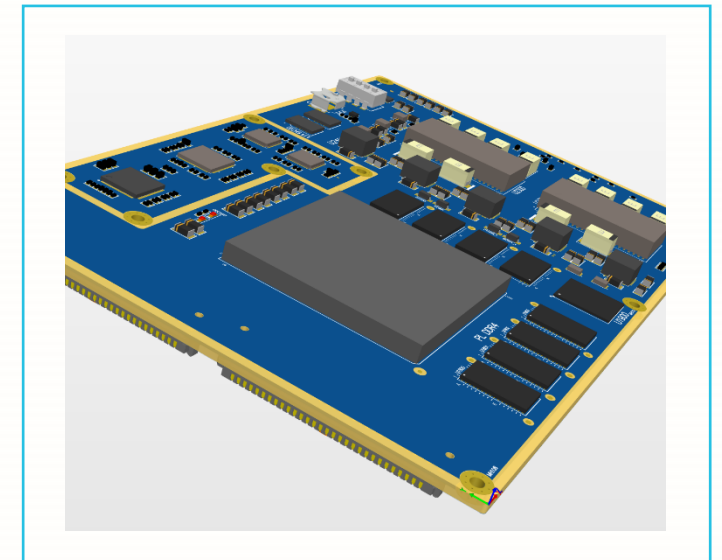
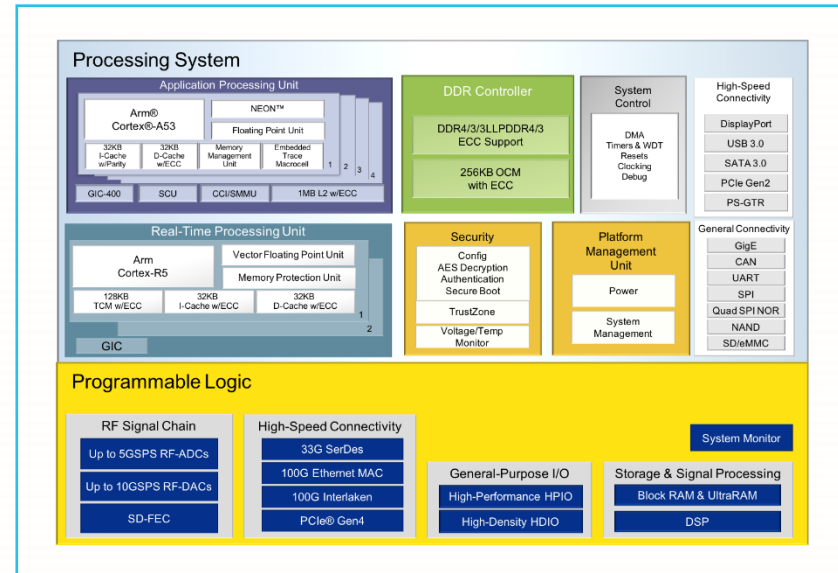


## Applications requiring Advanced Digital Radio technology

- Anti-Drone & Unmanned Aerial System
- Phased Array Radar in Aerospace & Defense
- Complex Test and Measurement Instruments
- 5G New Wireless Infrastructure
- Next Generation Mobile Satellite Network

# ADRS1000

- Ultra high-performance based on state-of-the-art Xilinx SoC FPGA with Arm Cortex Multi-core Processors, capable of providing up to 16 channels RF data converters for operation up to 6GHz RF bandwidth
- Provide design support and solution customization services





# Advanced Digital Radio (ADR) – (formerly, Re-configurable Embedded System or “RES”)

- **Proprietary SDR and RF modules**

- S\$4.4m contract secured and expected to be fulfilled in current FY.
- New development work completed in last FY and new orders expected in current FY.

- **ADRS1000**

- Advanced Digital Radio embedded module for complex SDR and AI inference application at the edge.
- Addressable markets: 5G, multi-beamforming, anti-drone radar, medical and test instrumentations
- Start commercial shipments in May 2022.

# Satcom Connectivity Solutions

# Vessel Monitoring System (VMS)

- To enable Fisheries Regulatory Authorities to
  - **prevent** Illegal, **U**nreported, **U**nregulated (IUU) fishing
  - **track and monitor** the activities of fishing vessels
  - improve **sustainability** of the marine environment
  - **protect** the national revenues from legal fishing
  - protect and enhance the **livelihoods** of fishermen
- VMS is a **mandatory service** required by the major fisheries authorities

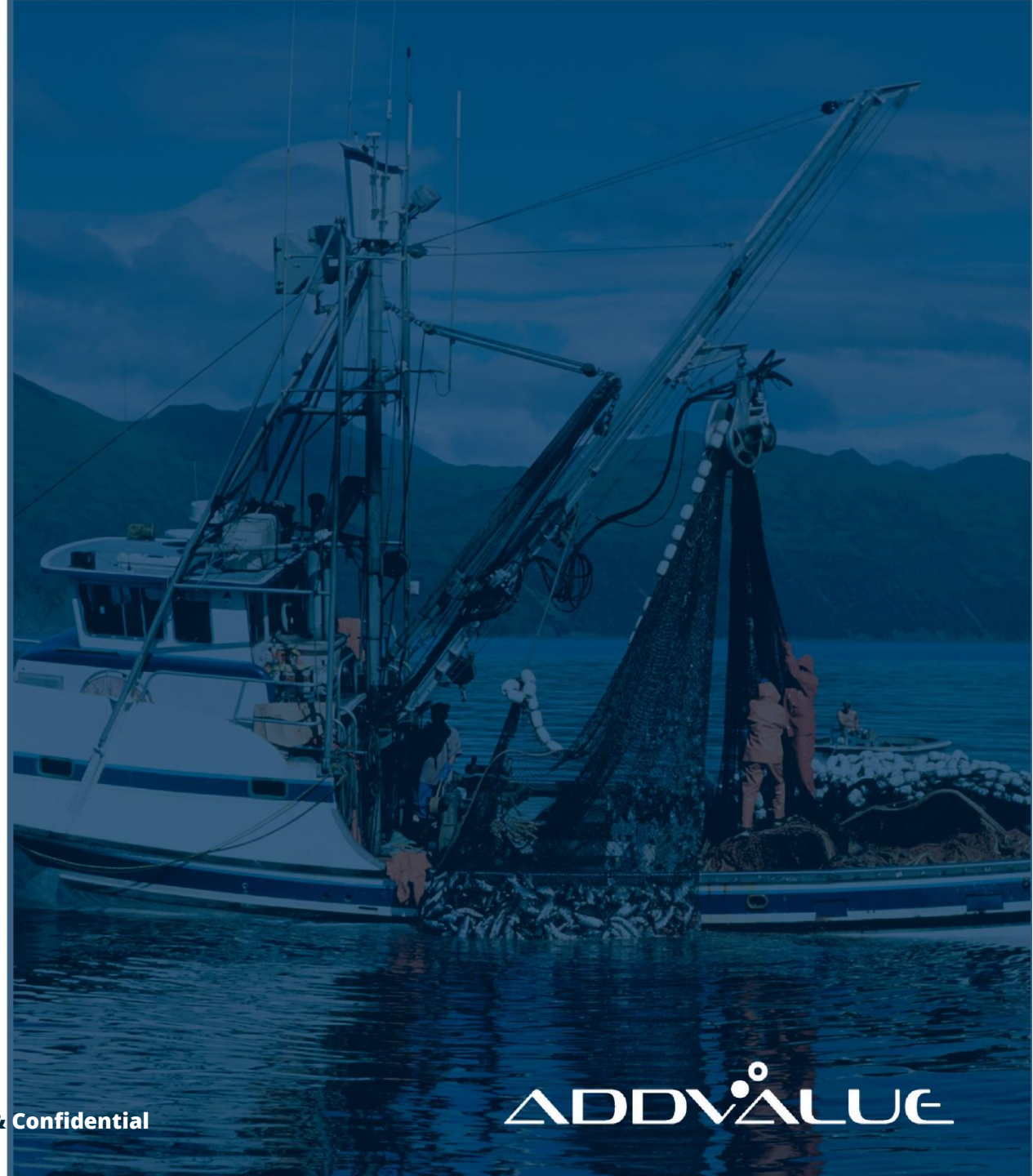
# Vessel Monitoring System (VMS) for Fisheries Sustainability Market

Addvalue iFleetONE VMS is approved by leading regulatory authorities for mandatory fishing sustainability programs:

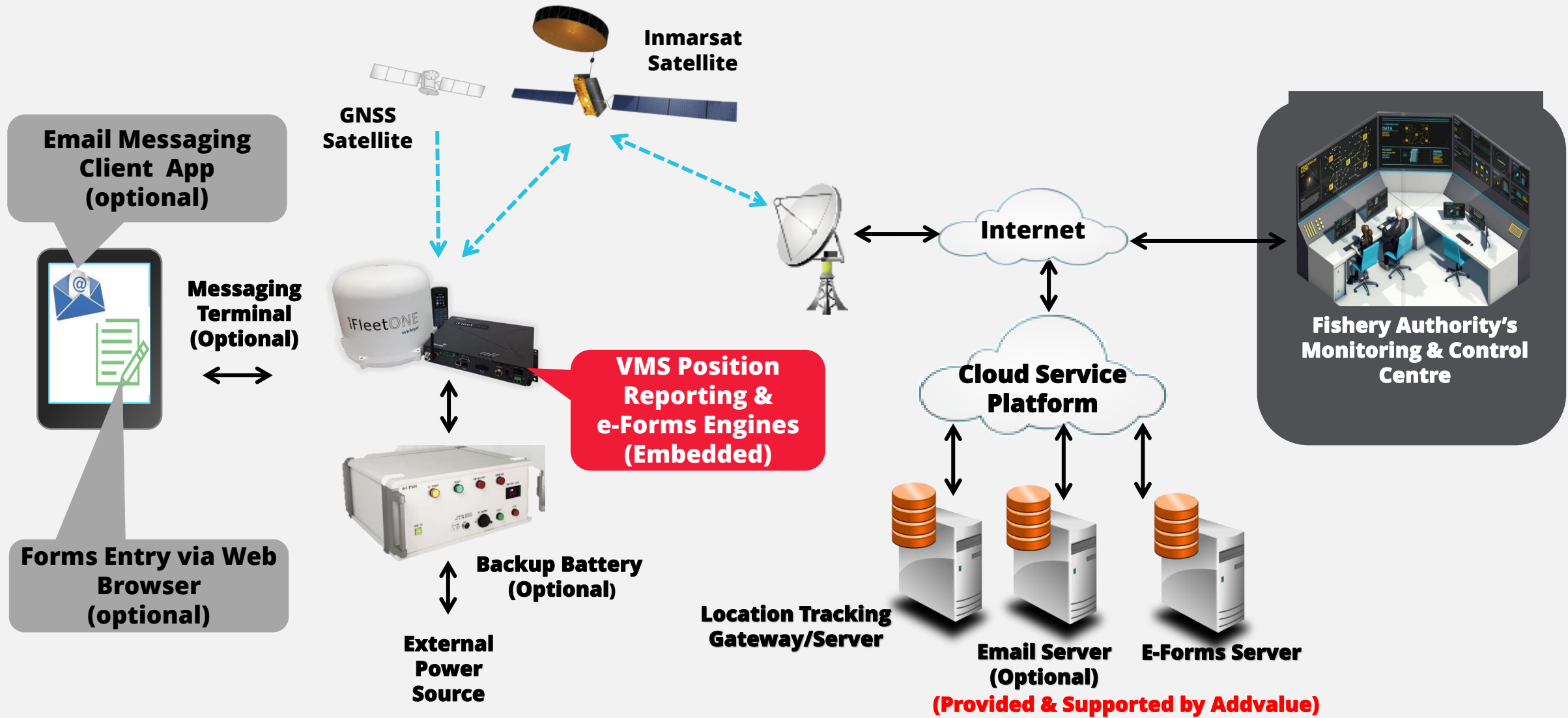
- US NOAA/NMFS for all US fisheries regions



- FAA and WCPFC for all fishing vessels active in Pacific Ocean Region



# Addvalue VMS End-to-End Solution for Fisheries Sustainability



# Value Proposition of Addvalue iFleetONE-VMS

- A 3-in-1 Solution offering



Fishery Authority's  
Monitoring &  
Control Centre

**FEATURE-RICH  
VMS SERVICES**



**ENHANCED CREW  
COMMUNICATIONS**



**BUSINESS  
INTELLIGENCE WITH  
AWS CLOUD SERVICES**



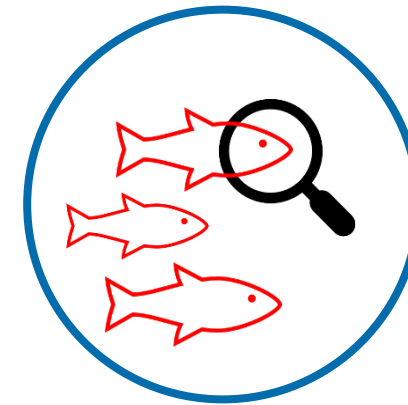
# Business Intelligence With AWS Cloud Services

## Benefits:

- **To the Fishermen:**
  - Improved operational efficiency
  - Improved revenue growth with Business Intelligence data
- **To the Fisheries Authorities:**
  - Improved law enforcement to protect the sustainability of the marine ecosystem using Business Intelligence data
  - Improved national revenue from legal fishing
- **To the General Public:**
  - Traceability guarantees better food safety



**PRE-SALE OF  
THE FISH  
CATCH**



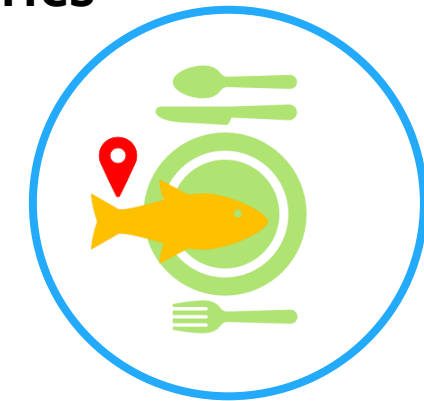
**FISH FINDING  
WITH DATA  
ANALYTICS**



**REVENUE  
PROJECTION**



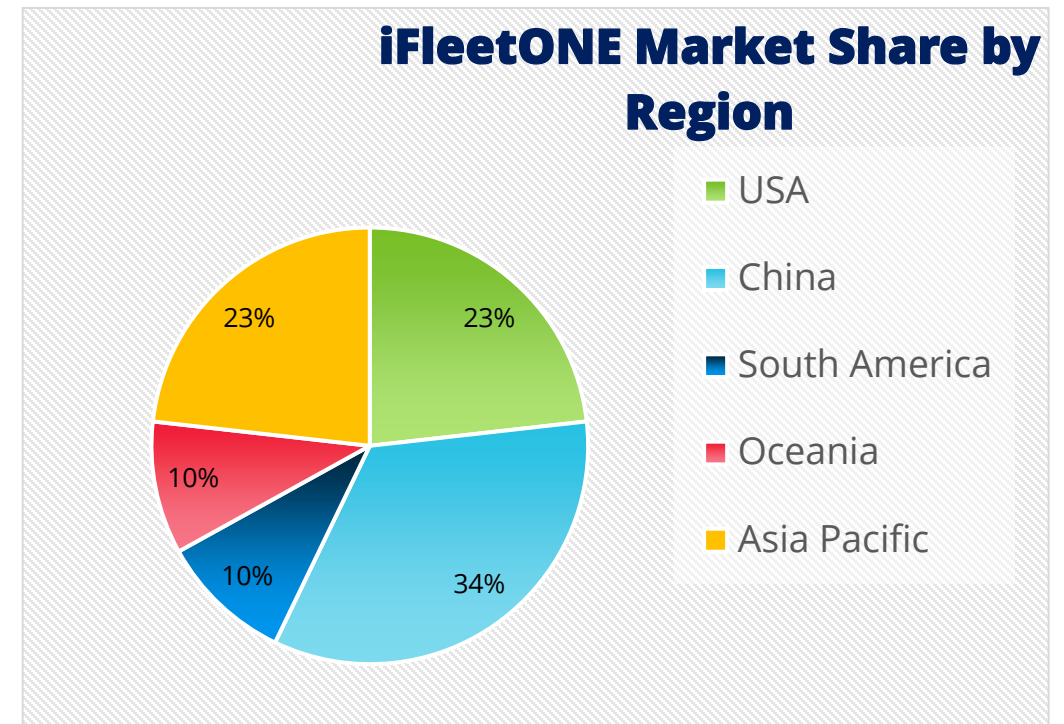
**ECOLOGICAL  
TREND  
ANALYSIS**



**CATCH  
TRACEABILITY**

# Satcom Connectivity (STC) – VMS for Fisheries Stepping Up Marketing Efforts

- Leverage off AWS marketing to improve market awareness





# Satcom Connectivity (STC) iFleetONE for Fishing Fleet Market TAM

- Market Intelligence: Inmarsat Survey Report on Small Vessels 2020
- Sustainability fishing, creating a platform for more digital applications
- Addressable Fishing Vessels in the Target Market (USA & APAC) (by vessel size)

#	Country	0-12m	12-24m	24m+	Addressable
1	China (>12m size vessels)	N.A.	54,554	35,072	89,626
2	Taiwan (>12m size vessels)	N.A.	6,141	973	7,114
3	USA	18,535	3,741	440	22,716
4	Australia		7,000		7,000+
5	New Zealand		1,500		1,500+
			<b>Total addressable Fishing Vessels:</b>		<b>127,956+</b>



# Satcom Connectivity (STC) – Digital Transformation M2M evolves into smart IoT in vertical markets

- *Power Grids Control*
- *Energy and Mining*

- *Environmental Monitoring*
- *Water Resource Management*

Sabre Ranger  
5000

- *Smart Farming*
- *Rural Connectivity (Bridging digital gaps)*

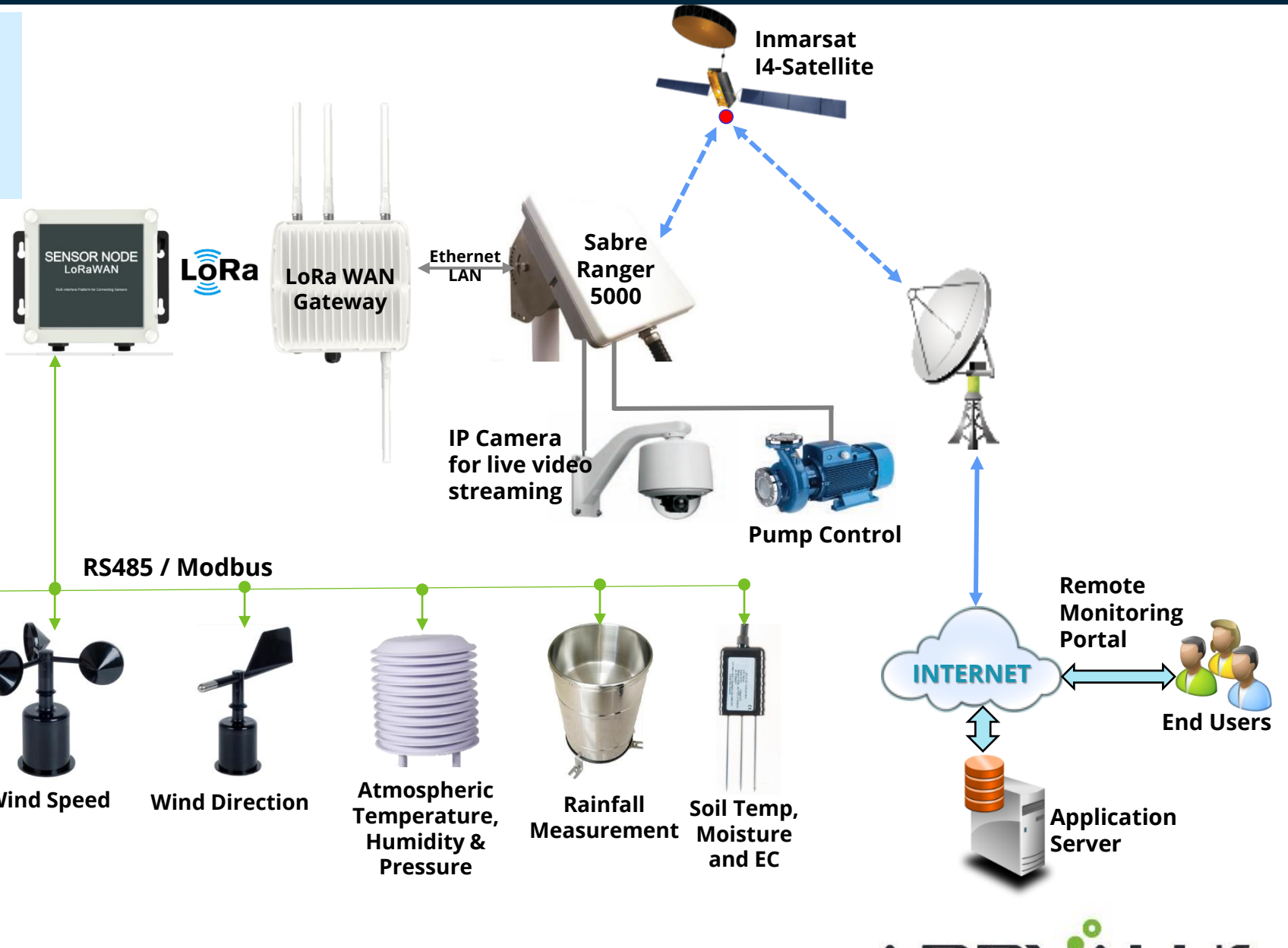
- *Disaster Responses (Flood, Tsunami Monitoring)*



# Example: Environmental Monitoring in Chile Patagonia

To study the effects of Global Warming

- Weather Monitoring
- Flood Monitoring
- Animal Monitoring

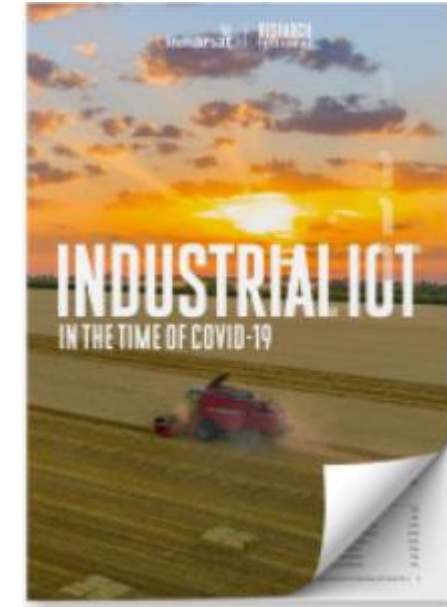


# Satcom Connectivity (SPC) – TAM Sabre Ranger 5000

Total Market Size in Australia (Focus Market)



	Utilities	Mining
<b>Expenditure next 3 years</b>	US\$350m	US\$1.7b
<b>Addressable Market</b>	IoT spending in AU = US\$700m per year over 3 years	



**Source:**  
**Inmarsat 2021**  
**Survey on IoT use**  
**in 5 industries**

# Use of Proceeds from Latest Fund-Raising Exercise

- Retire loans and strengthen balanced sheet
- Increase marketing and business development budget to accelerate revenue
  - Augment brand and product awareness
  - Expand channel partnerships

# Outlook for FY2023: On path of accelerated growth

- Sizeable cash-generative order book (US\$5.5m) mainly from IDRS and ADR, barring any unforeseen circumstances, the order book is expected to be fulfilled within the current financial year.
- Barring unforeseen circumstances, FY2023 is expected to be significantly better than FY2022.



# Thank You

[ADDVALUETECH.COM](https://addvaluetech.com)

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