



## ZEN TECHNOLOGIES LIMITED

Certified ISO 9001:2015, ISO 27001:2013, ISO 14001:2015, CMMI ML5  
Regd. Office : B-42, Industrial Estate, Sanathnagar  
Hyderabad – 500 018, Telangana, India  
Phone: +91 40 23813281, Fax No: +91 40 23813694  
Email: info@zentechnologies.com Website: www.zen.in  
Corporate Identity Number : L72200TG1993PLC015939

Date: September 5, 2023

To  
BSE Limited  
Phiroze Jeejeebhoy Towers  
Dalal Street  
Mumbai- 400001  
Through: BSE Listing Centre  
Security Code: 533339

To  
National Stock Exchange of India Limited  
Exchange Plaza, C-1, Block G,  
Bandra Kurla Complex,  
Bandra (E), Mumbai – 400 051  
Through: NEAPS  
Symbol/Security ID: ZENTEC

Dear Sir/Madam,

### Sub: Investor Presentation

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With reference to the subject cited above, please find the enclosed Investor Presentation.

The same information is also available on the website of the Company:  
<https://www.zentechnologies.com/investors>

Kindly take the same on record and acknowledge the receipt

Thanking You.  
Yours sincerely,  
**For Zen Technologies Limited**



M. Raghavendra Prasad  
Company Secretary and Compliance Officer  
M.no. A41798

Works : Plot 36, Hardware Park, Near Shamshabad International Airport, Hyderabad - 501 510, Telangana, India



**CMMIDEV/5<sup>SM</sup>**  
Exp. 2022-01-30 / Appraisal #2306







# Investor Presentation

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*September 2023*

# Zen Technologies – Solutions Offered

Protection Division	Description	Protection Solutions
<b>Training &amp; Simulation</b>  Live Simulation	<ul style="list-style-type: none"> <li>Designed to meet the training requirements of the mechanised forces in <b>field craft, battle drills, tactical and gunnery procedures</b></li> <li>Solutions include <b>TacSim indoor, Combat Training System, Shoot-Edge, etc.</b></li> </ul>	
Virtual Simulation	<ul style="list-style-type: none"> <li>Designed to train for <b>real life situations in a virtual scenario</b></li> <li>Solutions include <b>Rotary Wing Simulator, Medium Machine Gun, Automatic Grenade Launcher etc</b></li> </ul>	
Live Ranges	<ul style="list-style-type: none"> <li>Designed to provide <b>training for air-to-ground weapons delivery</b></li> <li>Solutions include <b>Containerized indoor shooting range, tank targets, tank zeroing systems etc.</b></li> </ul>	
<b>Anti-Drone Systems</b>	<ul style="list-style-type: none"> <li><b>Advent of drone technology in warfare, huge scope of developing anti-drone technologies</b></li> <li><b>Inducted into Indian Armed Forces As war and cross border threats intensify</b></li> </ul>	

Training Simulators & Anti-Drone Systems made with high end technology solutions makes Zen Technologies a distinct & niche player in the global defence industry



## *Competitive Advantages – Bet on Capability to Innovate*

- *IP driven advantage (High IP Content and low BOM 15-35%)*
- *130+ Patents filed of which 50 have been granted .*
- *Less dependence on imports for supply chain.*
- *611+\* Strong Human Capital*
- *Effective Virtual demo – saving cost and time*
- *Asset light business Model*
- *Diverse Customer Base - 100+ Government Customers*
- *90% orders from Repeat Customers – Customer Stickiness*

# Zen Technologies – Revenue Streams

## Training Simulation Equipment



- Leader in Defence Training Solutions
- Infrequent but large orders
- ~90% of order from repeat customers
- Remote Demonstration

## Counter-Drone Solutions



- Anti-drone systems are used to detect and/or intercept hostile drones
- System can detect and deactivate drones upto 20-km radius (depending on the size of the UAV)
- Remote demonstration – getting positive response
- Expecting big orders in the coming years

## Annual Maintenance Contract



- Recurring revenue stream
- New simulator sales leading to growth in revenues from AMC
- Growing service revenue from AMC ensuring sustainability
- Reached about ₹ 40 crores of annual AMC revenues
- May achieve ₹ 150 crores of AMC annual revenues by 2027-28

## ***The Book of Five Rings – Miyamoto Musashi***

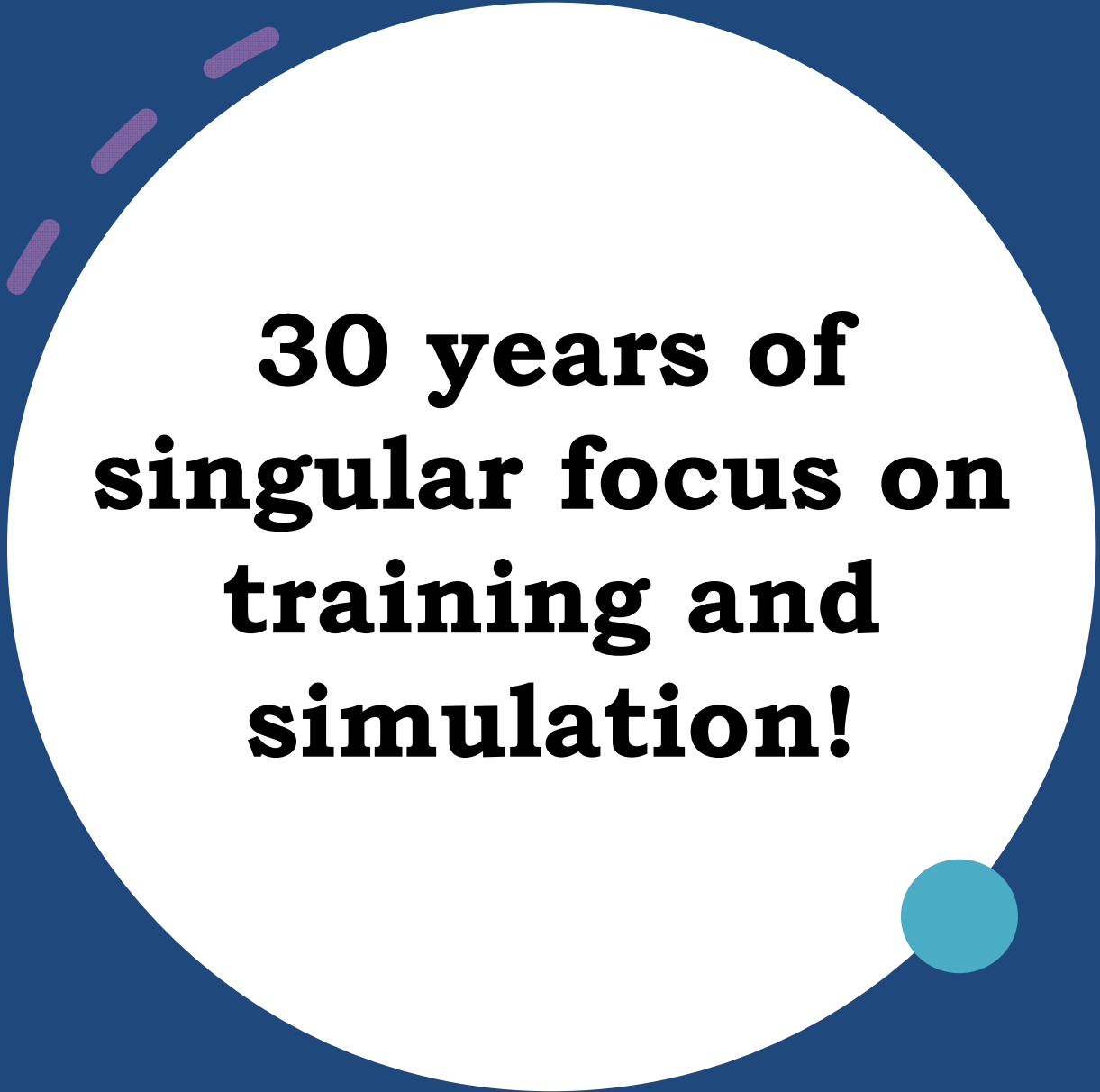
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The way is in training.

Miyamoto Musashi



**If you think training is important for Indian army, there is only one good bet in India**



**30 years of  
singular focus on  
training and  
simulation!**



## *And...*

- ▶ 120+ total Staff dedicated to R&D

Huge legacy libraries of Reusable Software, Electronics and Mechanical modules

Huge Collection of Weapon replicas and their physics

30 years worth of Data being used in AI to reduce training time

Extremely Leveraged R&D – Only 73 Cr spent in the last 5 years

# *Zen's Unique Value Chain Designed to Scaleup*

▶ R&D

Engineering

Manufacturing (Outsourced) – Capex Minimized

On-site Installation and Training

Warranty

AMC (More on AMC later)

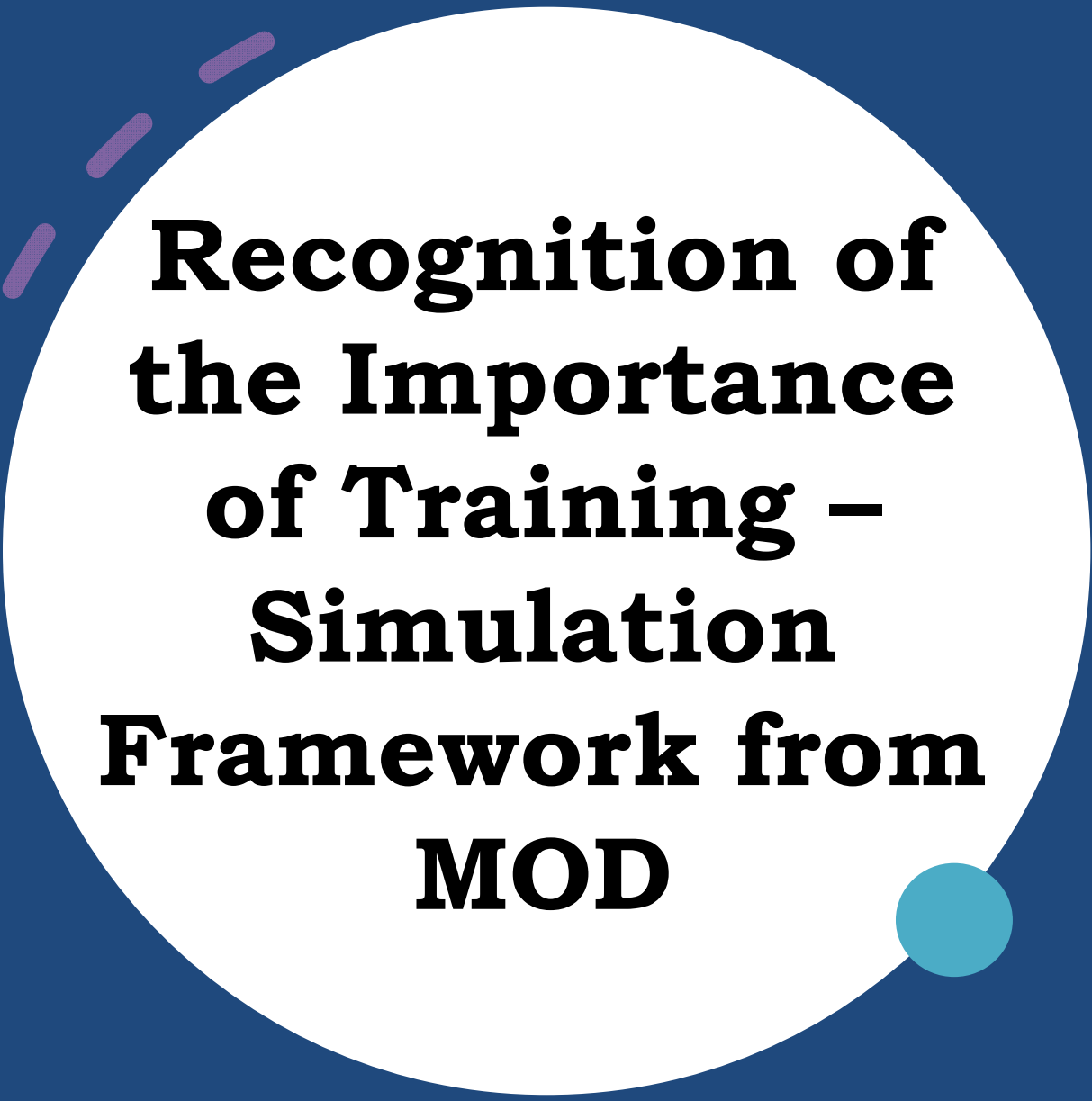


# Regulatory Tailwinds





**Buy Indian IDDM  
(Late Sri Parikkar) –  
2016 DPP and 2020  
DAP**



**Recognition of  
the Importance  
of Training –  
Simulation  
Framework from  
MOD**



# Policy

Ministry of Defence



## MoD promulgates framework for increased utilisation of simulators by the three Services & Indian Coast Guard

Posted On: 23 SEP 2021 3:11PM by PIB Delhi

### *Key Highlights:*

- **Aim is to transform to simulation-based training across all military domains**
- **To achieve cost effective, safe and smart training**
- **Emphasis on indigenous design & development**
- **Outsourcing of operation & maintenance of simulators to Indian companies**
- **Applicable to all types of in use/to be procured simulators**

Ministry of Defence (MoD) has promulgated the framework for enhanced and synergised utilisation of simulators by the three Services and the Indian Coast Guard (ICG). The overarching vision is to transform to simulation-based training across all military domains for combatants, leaders, maintainers, administrators, life science experts, procurement and financial agencies and thus achieve cost effective, efficient, safe, fast-paced and smart training.

► <https://pib.gov.in/PressReleasePage.aspx?PRID=1757253>

# Policy

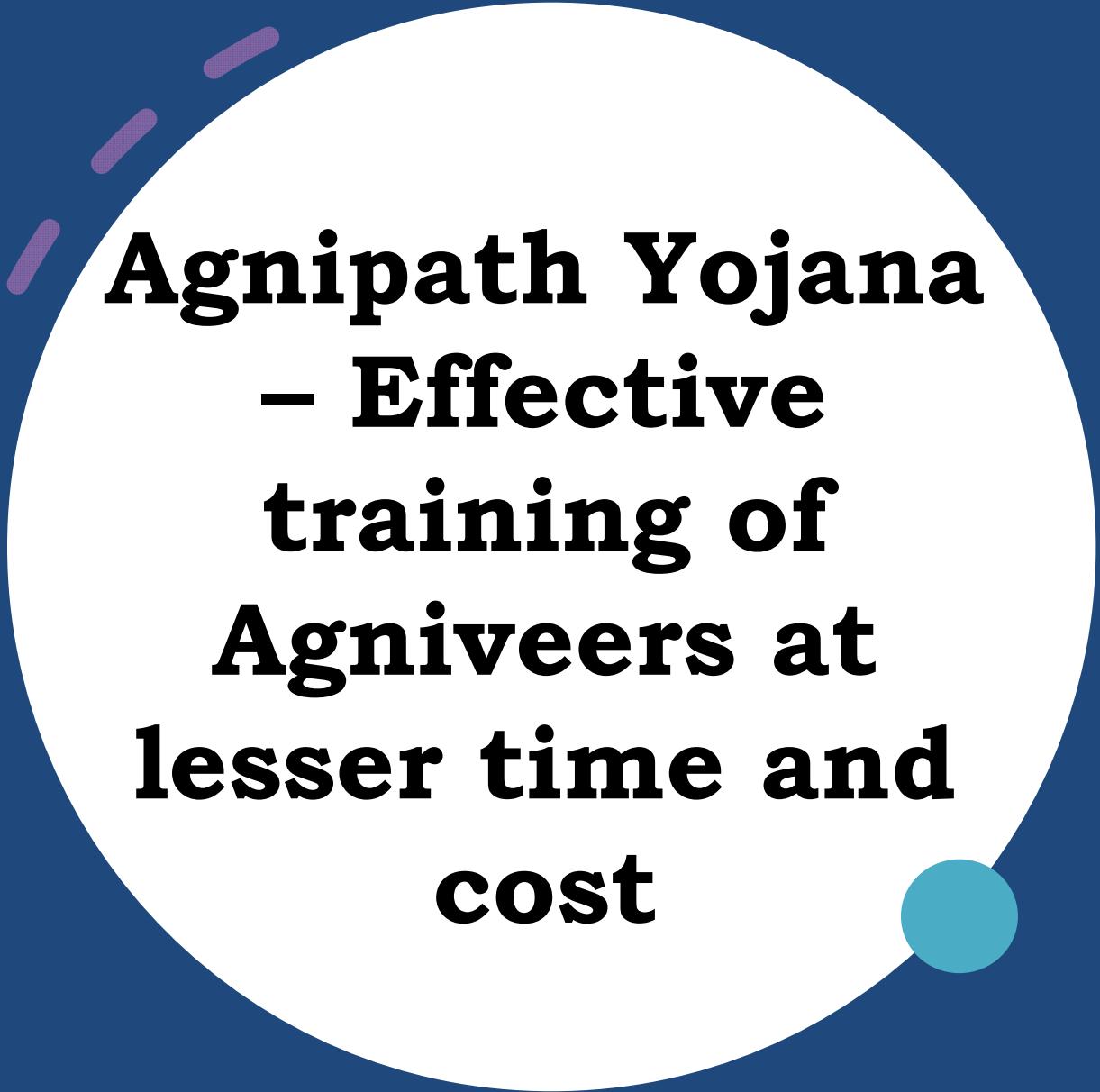
The framework lays emphasis on indigenous design & development as well as outsourcing of operation and maintenance of simulators to the Indian companies. The framework has the following goals and objectives:

- To reduce live equipment utilisation.
  - To ensure capability plans cater for phased induction of simulators.
  - To duly factor requirement of simulators at the planning stage of procurement.
  - To coordinate among various agencies of the Government and factor combined requirements of simulators during procurement.


The policy will be applicable to all types of simulators in use/to be procured in the future by the Armed Forces. Avenues of application of simulation technology will be constantly explored to achieve a high level of op preparedness while reducing expenditure on training and preserving the life of equipment.

A detailed action plan with assigned responsibility to all the constituents of MoD and industrial association will be followed to revitalise the exploitation of simulators by the three Services and the ICG. The Indian agencies involved in development, production and maintenance would be engaged by the Services to ensure highest level of indigenisation for production, deployment and maintenance of the military simulators.


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**Agnipath Yojana  
– Effective  
training of  
Agniveers at  
lesser time and  
cost**



**Four 'Positive  
Indigenisation' lists  
prohibit import of 12  
products developed  
by Zen.**



**Aggressive  
#Atmanirbharta push  
towards  
indigenisation  
through iDEX and  
Make-2**



## The order book position of the simulators over the years

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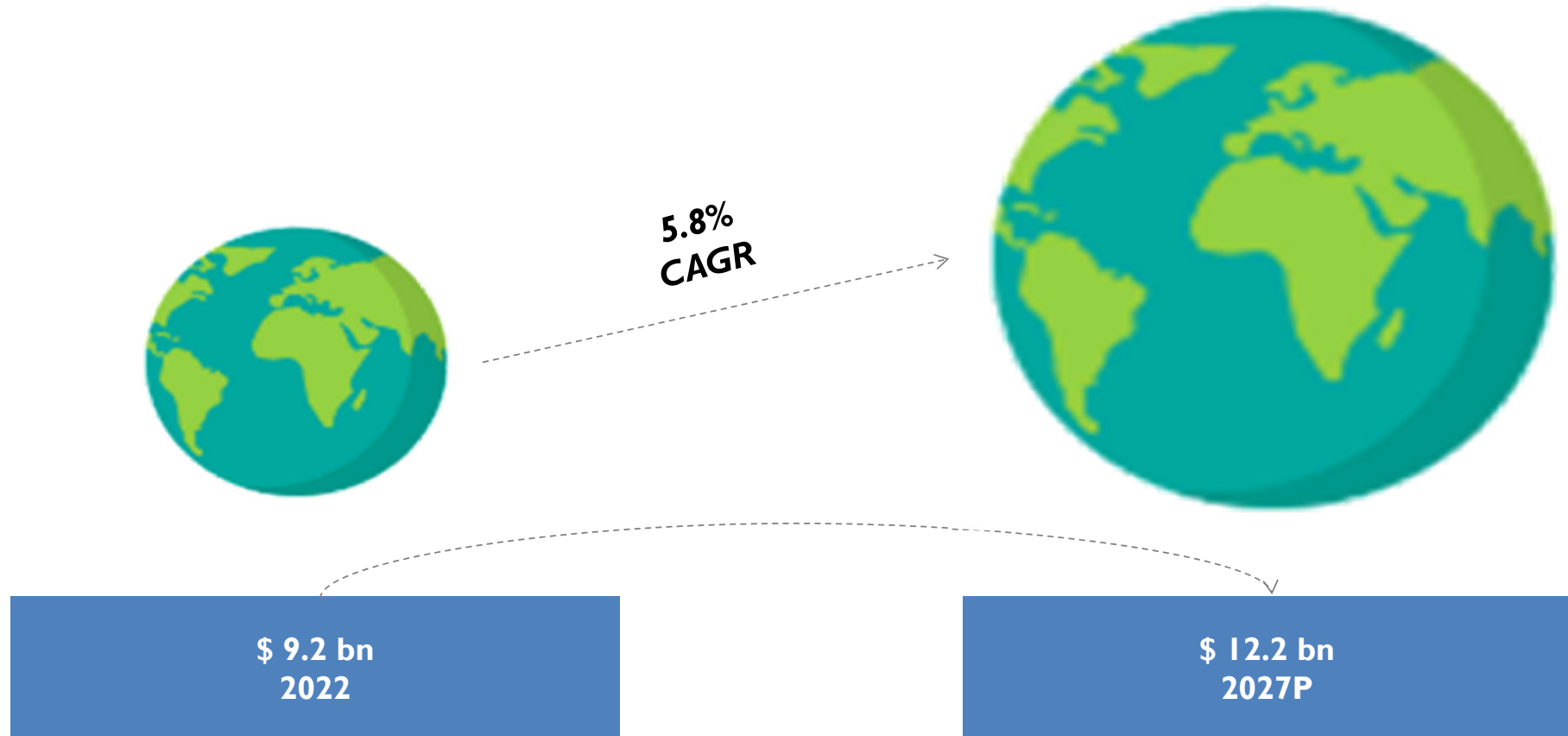
<b>Order Book of Past Years</b>					<b>(In INR Crs)</b>
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>As on Sept 5, 2023</b>
<b>Products</b>	65.96	72.30	183.74	240.20	590.96
<b>AMC</b>	94.83	120.37	115.63	145.61	228.25
	<b>160.79</b>	<b>192.67</b>	<b>299.37</b>	<b>385.81</b>	<b>819.21</b>

▶ As on 31<sup>st</sup> March each year

# Military Training Simulators: A Snapshot



Global Market



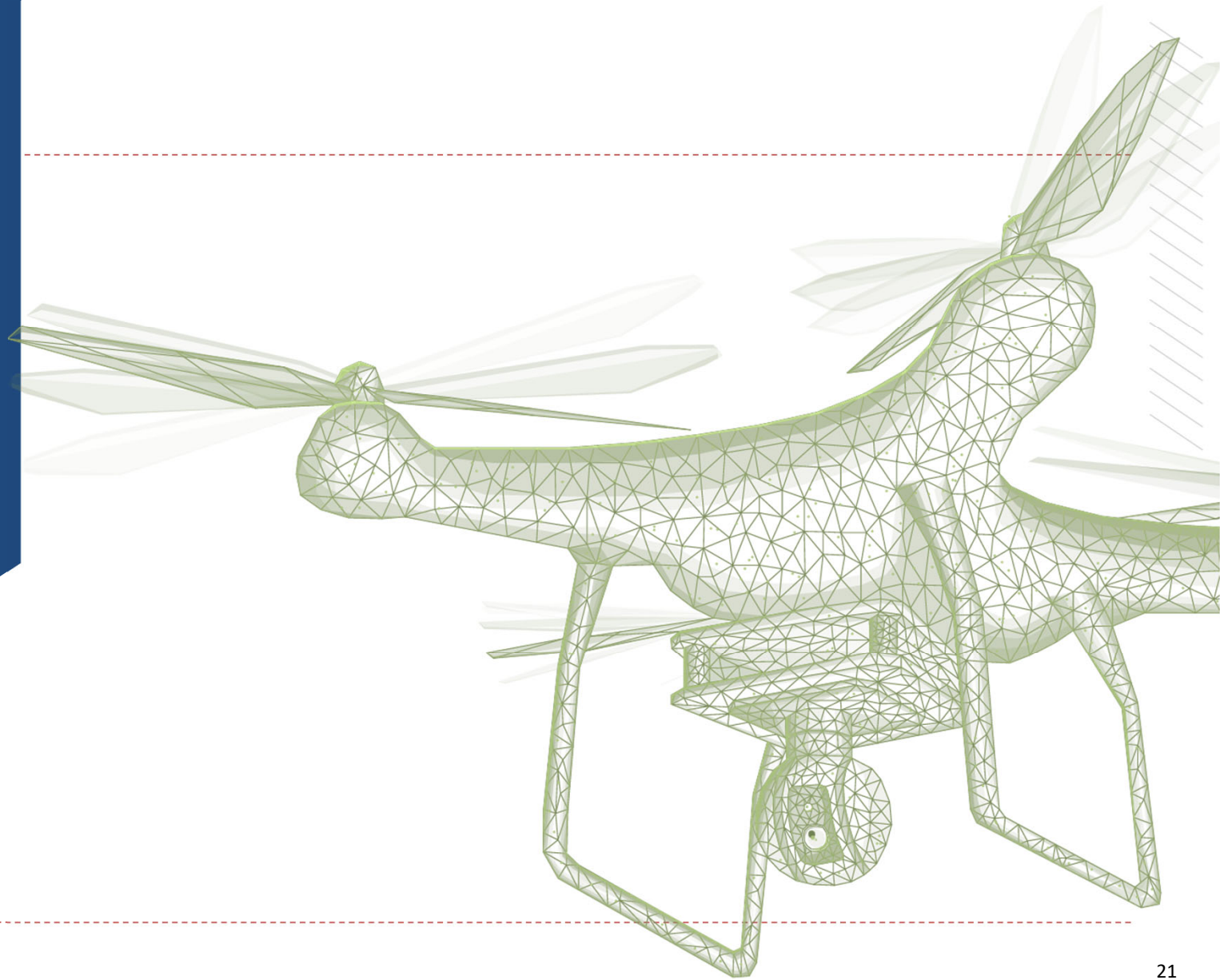
# *Military Training Simulators: A Snapshot*




Indian Market


INR 15,000 Cr  
Estimated Indian Market Size

# Anti-Drone Systems

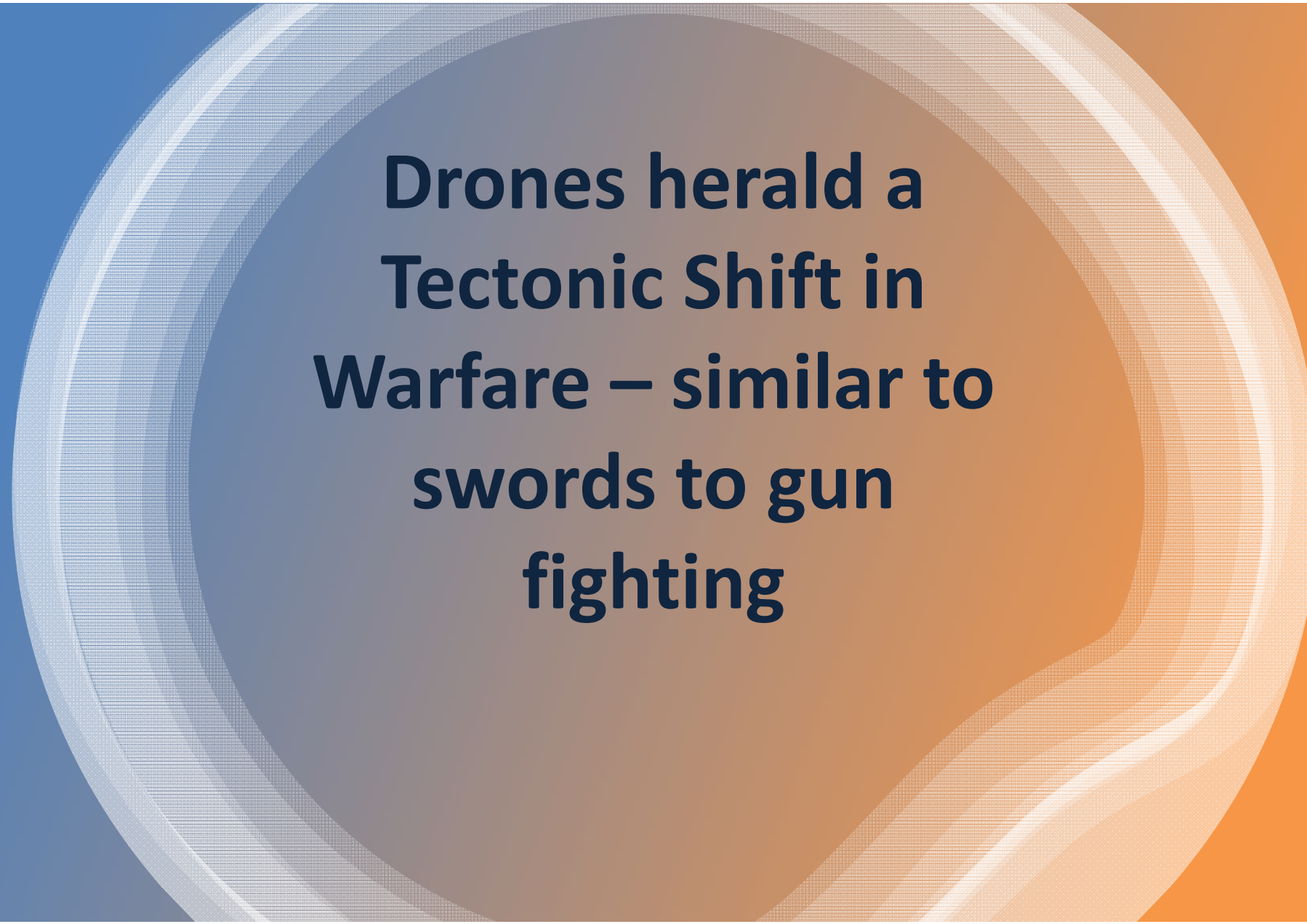




***Most frictionless  
product – 3 decades  
of Zen***







**Drones herald a  
Tectonic Shift in  
Warfare – similar to  
swords to gun  
fighting**

# Developed Anti-Drone System with Soft-kill as well as Hard kill option



# Article published on India Today

NEWS • LIVE TV **INDIA TODAY** APP

HOME MY FEED INDIA WORLD BUSINESS TECH MOVIES SPORTS SCIENCE HEALTH VIDEOS

News / India Today Insight /

## How the army is tweaking its vintage L-70 gun into a drone-killer

*A new interface with existing counter drone systems allows the World War-2 era anti-aircraft gun the capability to intercept drones*

ADVERTISEMENT



 Sandeep Unnithan   
New Delhi  
September 27, 2021 UPDATED: September 28, 2021 07:40 IST





## Article published on India Today



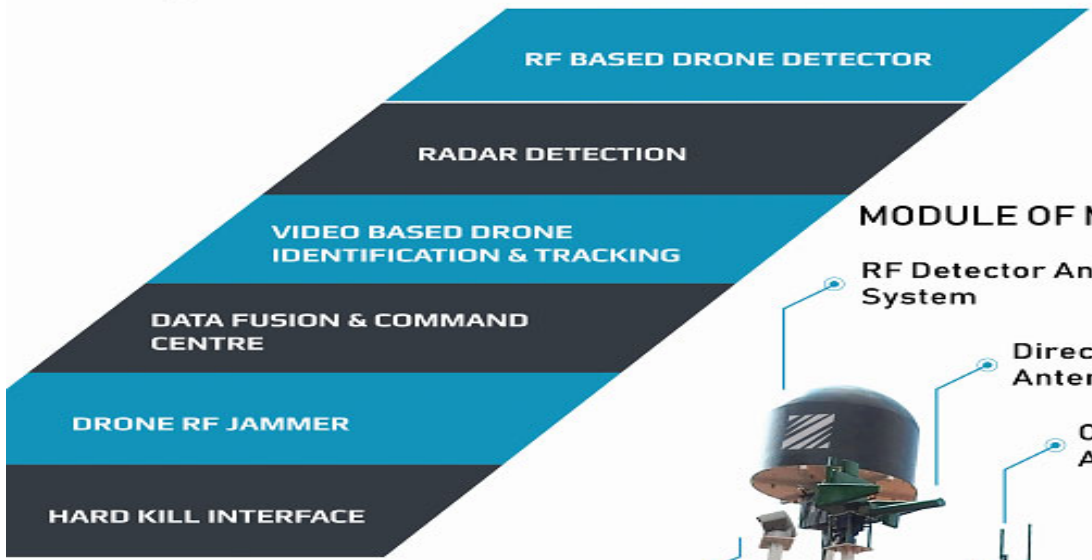
The optical sights spotted the rogue drone hovering over the target area nearly 500 metres away. The gunners studying the target in their command post gave the order to engage the target. Within seconds an L-70 gun slewed to towards the left and shot off a four-round clip into the sky.

The proximity fuses inside the 40 mm shells spinning through the air exploded, creating a cloud of thousands of tungsten fragments which shattered the drone. Four days later, on September 21, the army repeated the test at the Army Air Defence College on the seafront at Gopalpur, Odisha, and successfully intercepted another 0.6 metre wide commercially purchased drone.

This is believed to be the first test of the upgraded L-70 against small drones. Part of a project started around a year ago by the Army Air Defence Corps, the system interfaces a counter-drone system made by a Hyderabad-based private player with the army's in-service L-70 air defence gun. The counter-drone system made by Hyderabad-based Zen Technologies Ltd is similar to the one ordered by the Indian Air Force last month. The IAF placed a Rs 120 crore order for an unspecified number of counter-drone systems from the same firm. The Zen-Anti Drone Air Defence Systems or ZADS variant ordered by the IAF, is primarily a 'soft kill' system. It detects and jams radio frequency emissions from the drone between 10 metres and 10 kilometres. The firing trials in Gopalpur are the first use of it as a 'hard kill' system, where it physically destroys the drone.



# ANTI-DRONE SYSTEM



AIRPORTS & COUNTRY BORDERS

OIL & GAS INDUSTRIES

PUBLIC SPACES & INFRASTRUCTURES

VIPS' / HOME LAND SECURITY

MODULE OF MULTI SENSOR SETUP INCLUDE:

RF Detector Antenna System

Direction Jamming Antenna

Omni Jamming Antenna

Video based Drone Identification & Tracking



Anti-Drone System Mounted On Vehicle



## The order book position of the ADS over past two years

Order Book			(In INR Crs)
	2022	2023	As on Sept 5, 2023
<b>Product</b>	131.35	87.28	456.11
<b>AMC</b>	-	-	-
	<b>131.35</b>	<b>87.28</b>	<b>456.11</b>

▶ As on 31<sup>st</sup> March each year

**Difference  
Between Zen  
and Other  
Players:**

▶ **Mindset –**

Infinite Game Player

VS

Finite Game Player





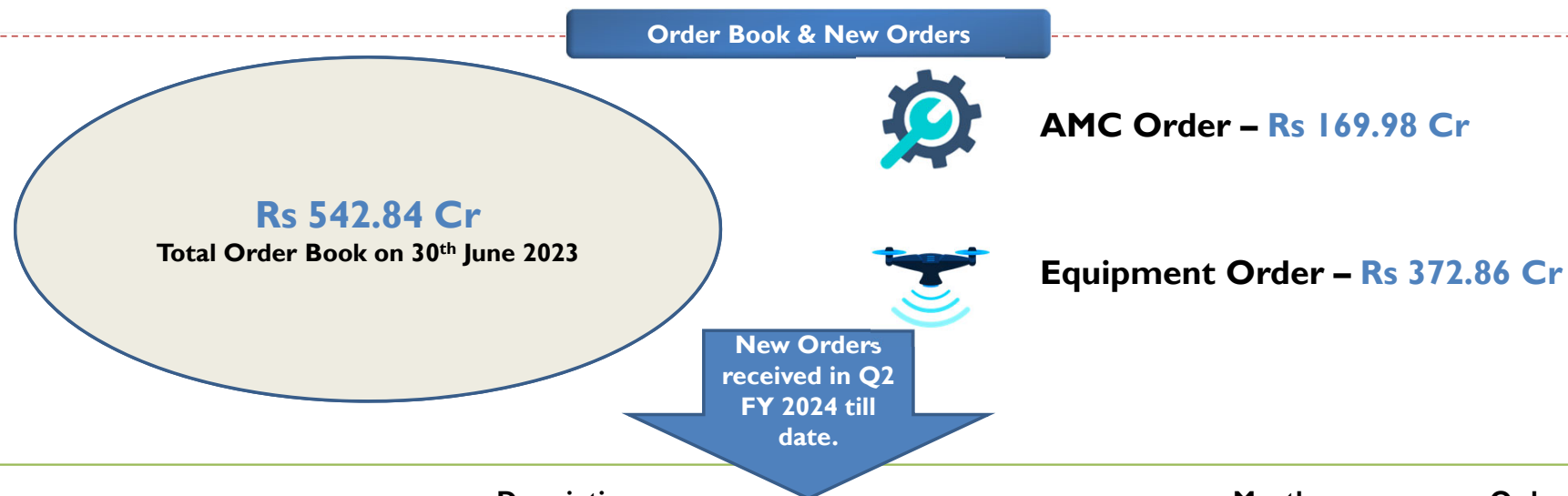
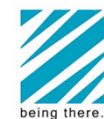
***AMC***  
Starts after 2-3 year  
warranty period

## Current → Future



- ▶ ~Rs 40 Crores
- ▶ By 2025 AMC would increase to ~70 Crores, as per current Order Execution
- ▶ Order book worth ~Rs 1,270 Crores
- ▶ AMCs expected to increase to ~Rs 150 Crores by 2027-28

# Winning new orders on back of continuous R&D efforts

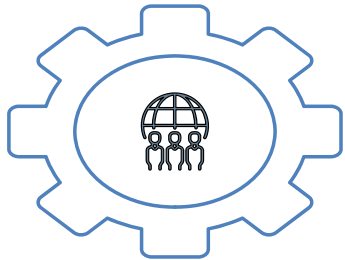


Sr. No	Description	Month	Order Size (In INR Crs)
1	Supply of <b>Anti Drone System</b> to MoD	July-23	160
2	Significant order win in the <b>Export Market</b> (includes both Training Equipment and ADS)	July-23	340
3	Supply of <b>Training Equipment</b> to MoD	Aug-23	55
4	Supply of <b>Training Equipment</b> to MoD	Aug-23	72
5	Supply of <b>Training Equipment</b> to MoD	Sept-23	105
			<b>732</b>

Note – New Orders include both Equipment and AMC component of orders.

# *Anti-Drone Industry: Key Growth Drivers*

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## **INCREASED DEMAND IN MILITARY AND NATIONAL SERVICES**

- *Due to the asymmetric damage the drones can do, Anti-drone systems will continue to see growth in the demand.*



## Increasing focus on International Markets

- Keen focus on **export markets** has resulted in brisk growth in export markets
- **Fast clearances from Government** for exports will further act as tailwind



# Other Strategic Priorities

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## Expansion through Inorganic Growth

- Actively evaluating **potential targets** for **acquisition** to further expand the business in adjacencies – market and product

# Other Strategic Priorities

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## Sustainability

- On World Environment Day, **June 5 2023**, collaborated with **TERI\*** and released a report on how simulators can enhance **sustainability in the armed forces.**
- **Utilizing simulators costing Rs 15Cr** for one particular type of weapon platform over a 30-year period can result in savings of **~Rs 380 crore**

Note – \*TERI = The Energy and Resources Institute

Source: Industry Reports; News Articles

# Zen Technologies – Investment Merits



# Distinguished Board of Directors (1/2)



**Mr Ashok Atluri**  
Chairman & Managing Director

- **First generation** entrepreneur & **visionary founder** of Zen Technologies
- He is a **PG Diploma holder** in **Applied Computer Science**
- He was awarded the title of “**Small Scale Entrepreneur of the Year**” by the Hyderabad Management Association in **1998**



**Mr Kishore Dutt Atluri**  
Founder & Joint Managing Director

- Mr Kishore Dutt Atluri is a **Post graduate in Computer Application** from University of Hyderabad
- He co-founded Zen Technologies in **1993** with primary objective of designing and developing **training simulators** for defence and security forces
- He has over **21 patents** in his name and he is also in-charge of all **defence marketing** activities at Zen
- He has a deep insight of **simulation technology** and its application for defence and the homeland security



**Ms Shilpa Choudari**  
Whole Time Director

- Ms Shilpa Choudari holds a **Bachelor's Degree in Technology** & a **Master's degree in Finance and Foreign Trade**
- She has worked as a **research associate** and later as an **AGM Sales and Marketing** which has given her a deep insight into Zen's products
- She has published many articles in over **10 books** on different subjects



**Mr M Ravikumar**  
Whole Time Director

- Mr. M Ravikumar is a **technocrat** and an **expert in systems programming and robotics**
- He has **20 plus years of experience** in the software industry
- He is actively involved in the design and development of the present range of **simulators** for the company in his role as **Head, R&D Division**
- He is the person behind the successful development of **Zen SATS® SL, Zen AWeSim®, Zen TacSim® and ACTS**

# Distinguished Board of Directors (2/2)



**Dr R K Tyagi**  
Independent Director

- Dr. R.K. Tyagi is a **Ph.D (Doctorate in Management Studies)** from Agra University & has completed his **Engineering (Electronics & Communication)** from **IIT, Roorkee**, **MBA (Marketing)** from IGNOU, New Delhi
- He has **46 years** plus experience including **14 years** of board level positions in various organisations.
- His strengths are **organisational strategy** and **building strategical alliance, leadership and team development**, growth/turnaround specialist in business operations, corporate governance and CSR, R&D, technology, Investment and risk management



**Dr Ajay Kumar Singh**  
Independent Director

- Dr. Ajay Kumar Singh is a **Post Doctoral Fellow** in **Social Marketing** from **ISB, Hyderabad** and also holds a Ph.D.
- He is a recipient of the prestigious **“The Rashtrapati Rovers Award”** awarded to him in the year 2000
- Dr. Ajay Kumar Singh has extensive years of experience across functions ranging from leadership roles, **program planning and designing, implementation, teaching, monitoring and evaluation, business development and consulting**
- Dr. Singh is also a member of the **Academic Advisory Council of the Institute of Public Enterprise, Hyderabad Telangana**



**Mr Amreek Singh Sandhu**  
Independent Director

- Mr. Amreek Singh is an **M.Com, LL.B., MBA, FCS, FCMA, EPAF-IIM**, with over 27 years of industry experience
- He was recognised with **best CFO** award by **9.9 Group (CFO India)** in the year **2017 (Risk Management)** and **2018 (Cash Management)**
- He also published an **Article on Inflation and Economic Recession** by **“CFO Asia”** before economic recession in 2007



**Ms Sirisha Chintapalli**  
Independent Director

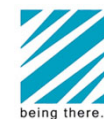
- Ms Sirisha Chintapalli is an Associate Member of the **Institute of Company Secretaries** of India and the **Institute of Cost Accountants** of India
- She has more than **11 years** of exposure and experience in the fields of **legal, finance, secretarial, insolvency and other regulatory compliance matters**
- She has successfully handled and completed various **issues / assignments / mergers** and is well-versed with various statutes involved in the day-to-day operations of the Company

# Strong Financial performance: Profit & Loss Statement (Standalone)



Income Statement (INR mn)	FY19	FY20	FY21	FY22	FY23	Q1FY24
Net Sales / Income from operations	922	1,470	496	537	1,614	1,324
<b>Expenditure</b>						
Cost of raw materials consumed	373	251	75	145	636	162
Changes in inventories of FG, WIP & SIT	-116	139	4	-62	-228	193
Manufacturing Expenses	50	58	32	41	76	19
Employee Benefits Expenses	157	167	136	148	228	107
Other Expenses	234	220	171	246	389	182
<b>Total Expenses</b>	<b>697</b>	<b>834</b>	<b>418</b>	<b>517</b>	<b>1,102</b>	<b>663</b>
<b>EBITDA</b>	<b>225</b>	<b>636</b>	<b>78</b>	<b>20</b>	<b>513</b>	<b>662</b>
<i>EBITDA Margin (%)</i>	<i>24%</i>	<i>43%</i>	<i>16%</i>	<i>4%</i>	<i>32%</i>	<i>50%</i>
Finance Cost	48	32	10	14	20	4
Depreciation & Amortization Expenses	38	38	40	37	44	15
Other Income	31	19	29	53	71	26
<b>PBT</b>	<b>171</b>	<b>586</b>	<b>57</b>	<b>19</b>	<b>539</b>	<b>670</b>
Income Tax	-21	-19	16	-2	163	199
<b>PAT</b>	<b>192</b>	<b>605</b>	<b>41</b>	<b>20</b>	<b>376</b>	<b>471</b>
<i>PAT (Margin)</i>	<i>21%</i>	<i>41%</i>	<i>8%</i>	<i>4%</i>	<i>23%</i>	<i>36%</i>

# Strong Financial performance: Balance Sheet (*Standalone*)



Balance Sheet (INR mn)	FY19	FY20	FY21	FY22	FY23
<b><u>EQUITY &amp; LIABILITIES</u></b>					
Share Capital	77	77	80	80	80
Reserves & Surplus	1,333	1,910	2,052	2,837	3,112
<b>Non Current Liabilities</b>					
Long term borrowings	88	2	2	31	1
Deferred tax liabilities	14	16	17	18	23
Other Non Current Liabilities	-	-	-	-	-
<b>Current Liabilities</b>					
Short Term Borrowings	261	6	7	92	58
Trade Payables	75	51	25	33	37
Other Current Liabilities	387	71	55	487	1,154
<b>Total Liabilities</b>	<b>2,235</b>	<b>2,134</b>	<b>2,236</b>	<b>3,579</b>	<b>4,464</b>
<b><u>ASSETS</u></b>					
<b>Non Current Assets</b>					
Tangible Assets	629	644	621	591	674
CWIP	4	-	-	25	19
Investments	134	159	241	243	243
Other Non Current Assets	135	299	218	216	171
<b>Current Assets</b>					
Cash & Bank	126	185	342	761	1,472
Short term loans/advances & other current assets	122	299	549	1,404	812
Inventories	353	104	92	142	411
Sundry Debtors	734	444	174	195	662
<b>Total Assets</b>	<b>2,235</b>	<b>2,134</b>	<b>2,236</b>	<b>3,579</b>	<b>4,464</b>

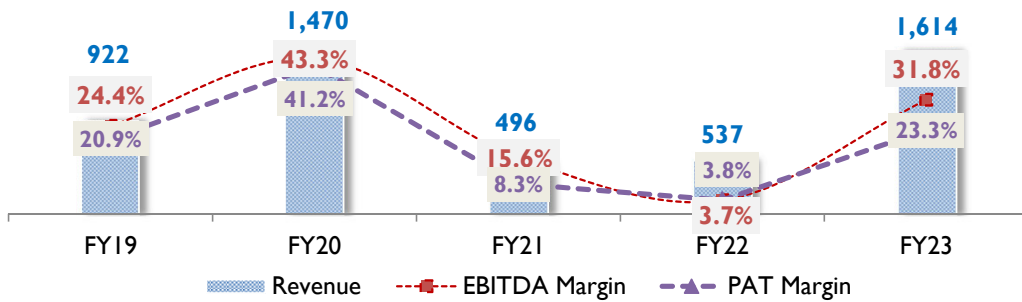


# Robust historical financial performance



## Revenue & Margin Profile

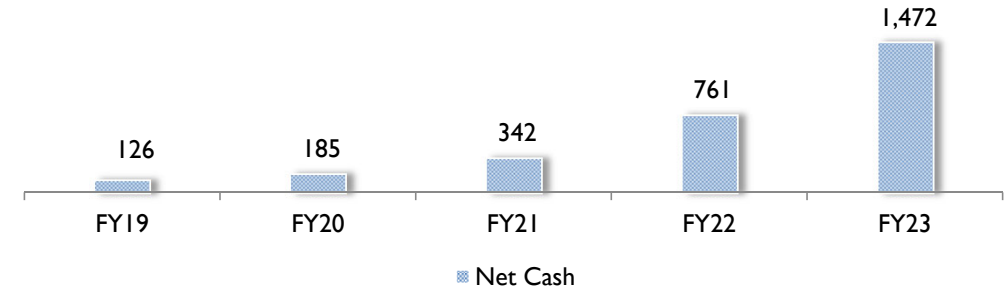
INR mn



## Net Cash Position

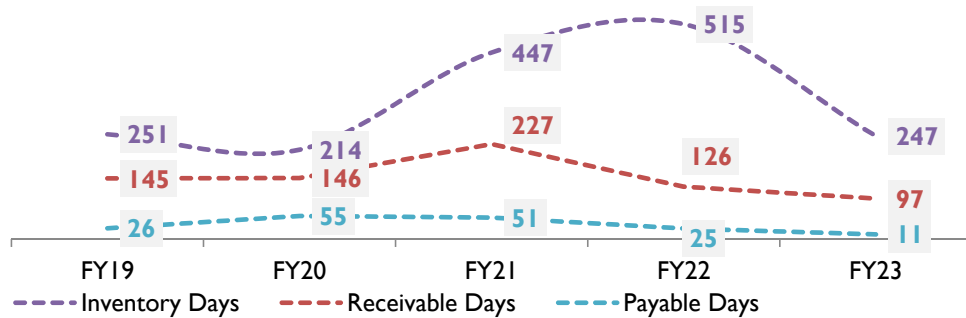
INR mn

### Net Cash

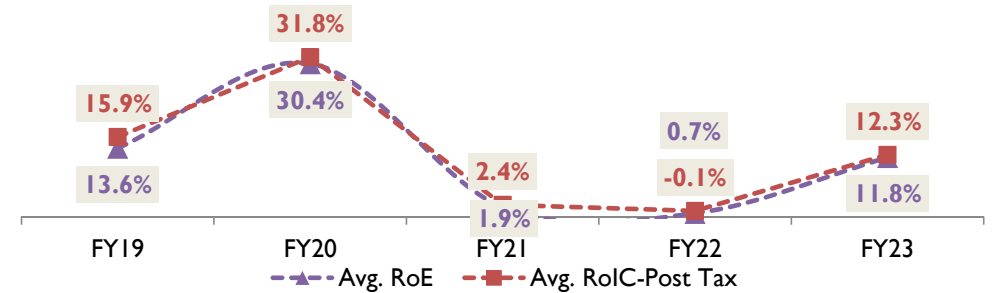


## Working capital cycle

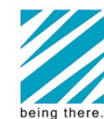
Days



## Return Ratios



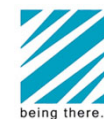
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Changes in inventories of FG, WIP & SIT	-116	110	-14	-114	-199	193
Manufacturing Expenses	47	58	42	41	76	19
Employee Benefits Expenses	166	196	156	210	359	107
Other Expenses	283	237	187	270	441	182
<b>Total Expenses</b>	<b>755</b>	<b>866</b>	<b>473</b>	<b>652</b>	<b>1,462</b>	<b>663</b>
<b>EBITDA</b>	<b>167</b>	<b>627</b>	<b>74</b>	<b>46</b>	<b>726</b>	<b>662</b>
<i>EBITDA Margin (%)</i>	<i>18%</i>	<i>42%</i>	<i>14%</i>	<i>7%</i>	<i>33%</i>	<i>50%</i>
Finance Cost	48	33	11	15	41	4
Depreciation & Amortization Expenses	38	46	50	48	61	15
Other Income	31	19	30	54	72	26
<b>PBT</b>	<b>112</b>	<b>567</b>	<b>44</b>	<b>33</b>	<b>717</b>	<b>670</b>
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<i>PAT (Margin)</i>	<i>14%</i>	<i>39%</i>	<i>5%</i>	<i>4%</i>	<i>23%</i>	<i>36%</i>

# Strong Financial performance: Balance Sheet

## (Consolidated)



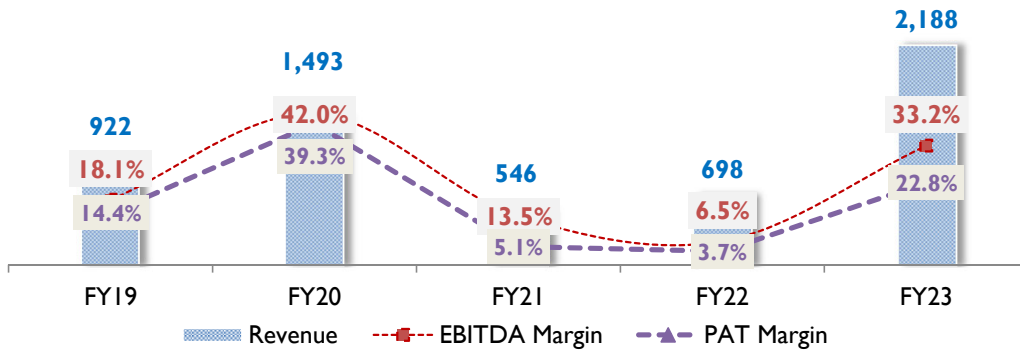
Balance Sheet (INR mn)	FY19	FY20	FY21	FY22	FY23
<b><u>EQUITY &amp; LIABILITIES</u></b>					
Share Capital	77	77	80	80	80
Reserves & Surplus	1,229	1,790	1,965	1,978	3,082
<b>Non Current Liabilities</b>					
Long term borrowings	33	-	14	12	42
Deferred tax liabilities	-	-	-	-	-
Other Non Current Liabilities	-	1	-	-	-
<b>Current Liabilities</b>					
Short Term Borrowings	261	11	7	93	59
Trade Payables	81	45	23	29	67
Other Current Liabilities	293	63	23	534	1,094
<b>Total Liabilities</b>	<b>2,185</b>	<b>2,141</b>	<b>2,233</b>	<b>3,690</b>	<b>4,737</b>
<b><u>ASSETS</u></b>					
<b>Non Current Assets</b>					
Tangible Assets	630	650	617	591	680
CWIP	4	-	-	25	19
Investments	78	22	22	22	22
Other Non Current Assets	78	22	22	22	7
<b>Current Assets</b>					
Cash & Bank	123	251	413	829	1,674
Short term loans/advances & other current assets	1,215	1,586	2,171	2,440	2,690
Inventories	353	140	147	250	490
Sundry Debtors	734	465	186	317	854
<b>Total Assets</b>	<b>2,185</b>	<b>2,141</b>	<b>2,233</b>	<b>3,690</b>	<b>4,737</b>

# Robust historical financial performance (Consolidated)



## Revenue & Margin Profile

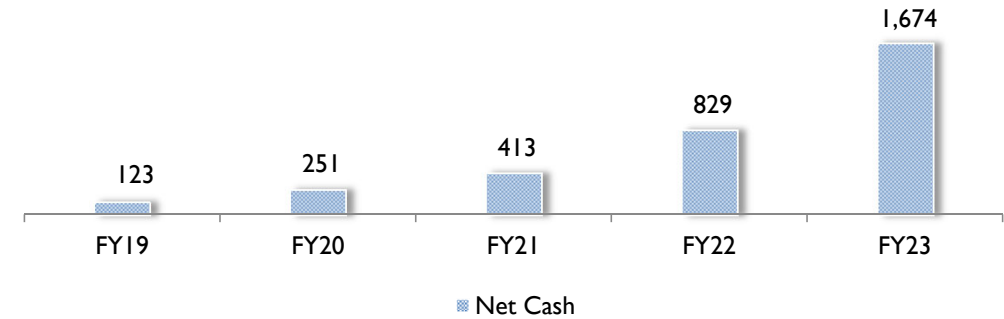
INR mn



## Net Cash Position

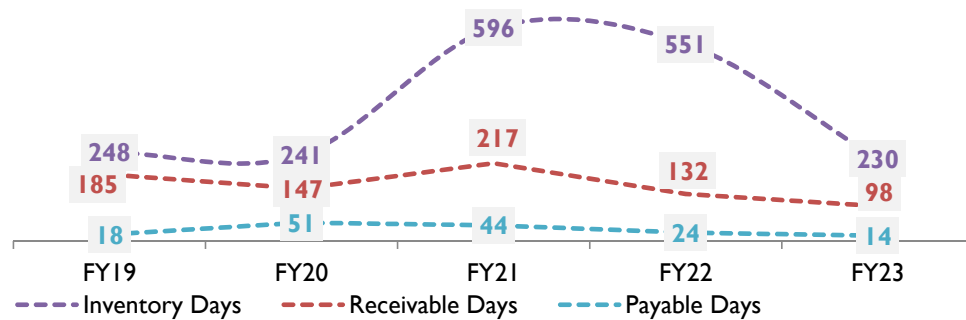
INR mn

### Net Cash

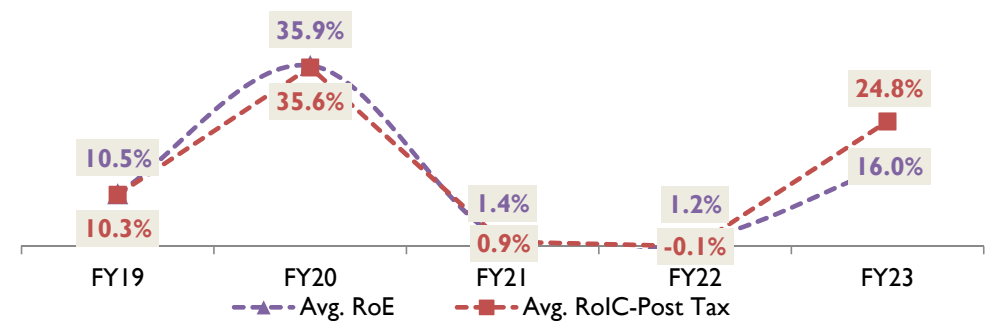


## Working capital cycle

Days



## Return Ratios



# Thank You

## Disclaimer

Certain Statements in this presentation concerning our future growth prospects are forward-looking statements, which involve a number of risks and uncertainties that could cause actual results to differ materially from those in such forward-looking statements. The risks and uncertainties relating to these statements include, but are not limited to, risks and uncertainties regarding fluctuations in earnings, intense competition, political instability and general economic conditions affecting our industry. The company does not undertake to update any forward-looking statement that may be made from time to time by or on behalf of the Company



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