

A HAZÁÉRT



# Future Fires plan for the Hungarian Defence Forces

LTC Barnabás BARTÓK  
HQ MND-C  
Targeting Section Head

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# INTRODUCTION

## **Military Experience:**

1998 - 1999	Platoon leader, 1 <sup>st</sup> BTRY, 62 <sup>nd</sup> Self-propelled Arty BN, 62 <sup>nd</sup> MECH INF BDE
1999 - 2004	Deputy BRTY CDR, 1 <sup>st</sup> BRTY, 62 <sup>nd</sup> Self-propelled Arty BN, 62 <sup>nd</sup> MECH INF BDE
2004 - 2007	1 <sup>st</sup> BTRY CDR, 25/101 Arty BN, 25 <sup>th</sup> INF BDE
2007 - 2008	FA BRTY CDR, Combat Support Battalion, 25 <sup>th</sup> INF BDE
2008 - 2011	Training Section Head (S-7), Combat Support Battalion, 25 <sup>th</sup> INF BDE
2011	Chief of Staff, Combat Support Battalion, 25 <sup>th</sup> INF BDE
2011-2019	Deputy BN CDR, 101 <sup>st</sup> Arty BN, 25 <sup>th</sup> INF BDE
2019-2022	BN CDR, 101 <sup>st</sup> Arty BN, 25 <sup>th</sup> INF BDE
2022-2024	BN CDR, 1 <sup>st</sup> Self-Propelled Arty BN, 1 <sup>st</sup> Armored BDE
2024	HDF, Land Forces Command, Artillery Branch Head
2024 -	HQ Multinational Division – Centre, G3 Fires, Targeting Section Head

# AGENDA

- Historical review
- Current capabilities
- Future plans for Artillery
- Loitering munitions
- Future considerations
- Opportunities for future collaborations

- **Historical review**
- Current capabilities
- Future plans for Artillery
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# HISORICAL REVIEW

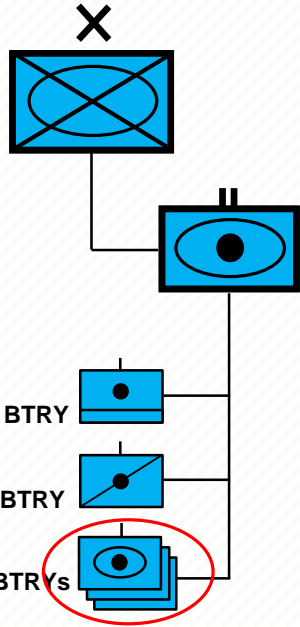
Weapon System	Number of BNs (late 90's)
BM-21 MLR	9
D-20 152 mm towed howtizer	8
2S3 AKATSYA 152 mm SPH	1
2S1 GVOZDIKA 122 mm SPH	6
1938/68M 122 mm towed howitzer	3
<b>Total</b>	<b>21</b>

**2004:** As a result of Light Infantry concept, only **ONE** Arty BN remained.

# AGENDA

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## PzH 2000HU Battalion



### Technical Parameters

- Caliber: 155 mm (L52)
- Firing range
  - HE BT: 30 km
  - HE BB: 40 km
  - VLAP: 65 km
- Additional ammunitions:
  - SMOKE
  - ILLUM
  - IR ILLUM
- MRSI

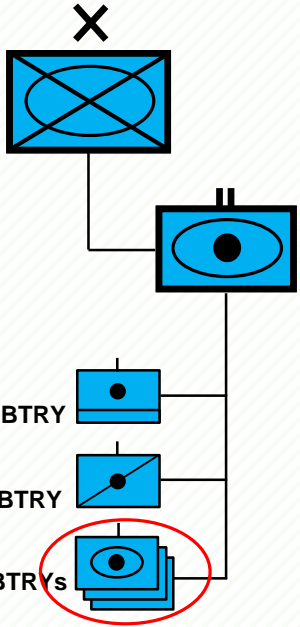


**3 x 8 = 24 pcs**



# DIRECT SUPPORT (MECHANISED INFANTRY BDE)

## PzH 2000HU

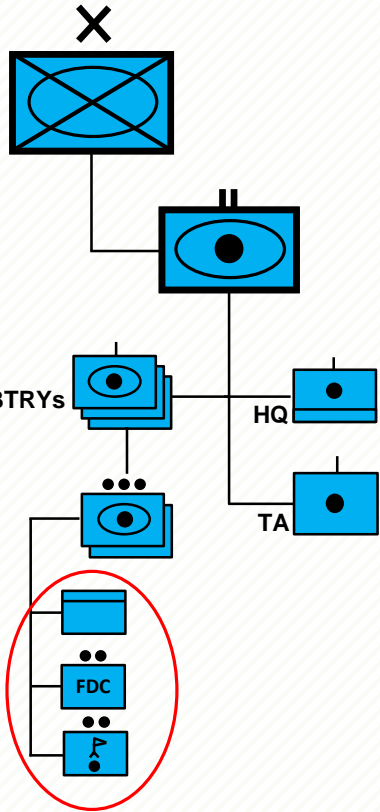


- Additional storage boxes
- **Barracuda** Multispectral Camouflage Net



# DIRECT SUPPORT (MECHANISED INFANTRY BDE)

## Firing platoon



PLT Leader



*iC2 Artillery*  
Digital Fire Control System

Fire Direction  
Centre



*iC2 Artillery*  
Digital Fire Control System

Survey Section



*(GIDRÁN 4x4)*  
Armored multi purpose vehicle

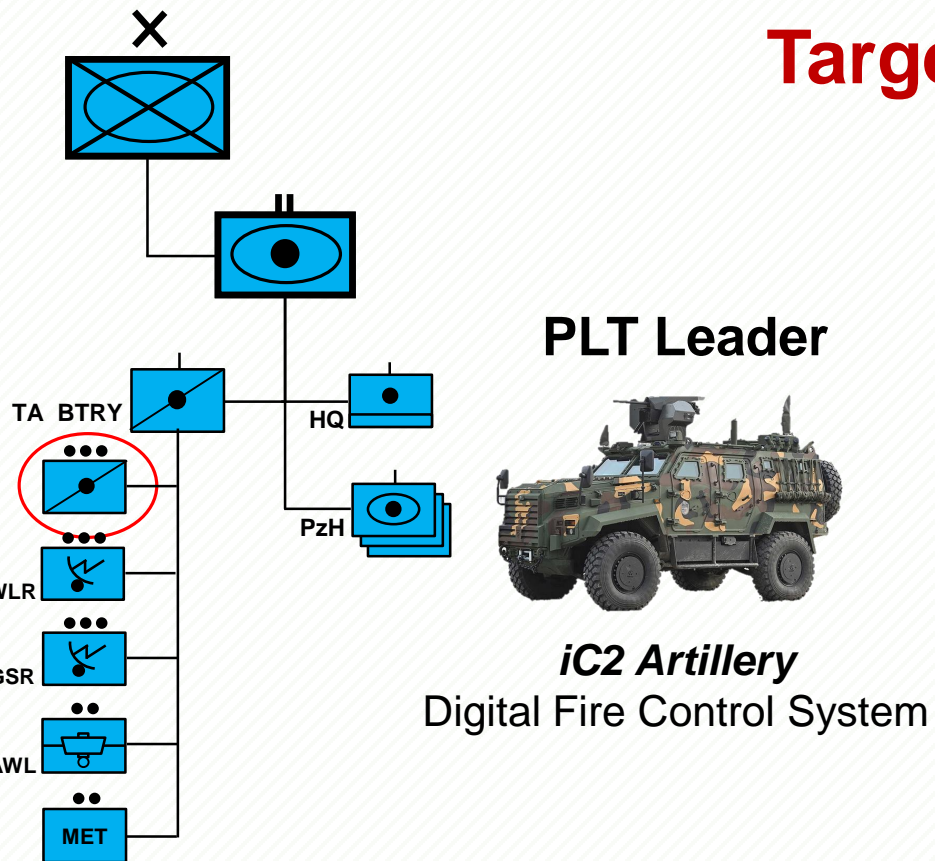


STERNA + PLRF25C



STERNA + MOSKITO

## Target Acquisition Platoon



- ### Technical Parameters
- Multispectral camera: 10 km
  - Ground Surveillance Radar: 24 km

Integrated Target Acquisition Platform



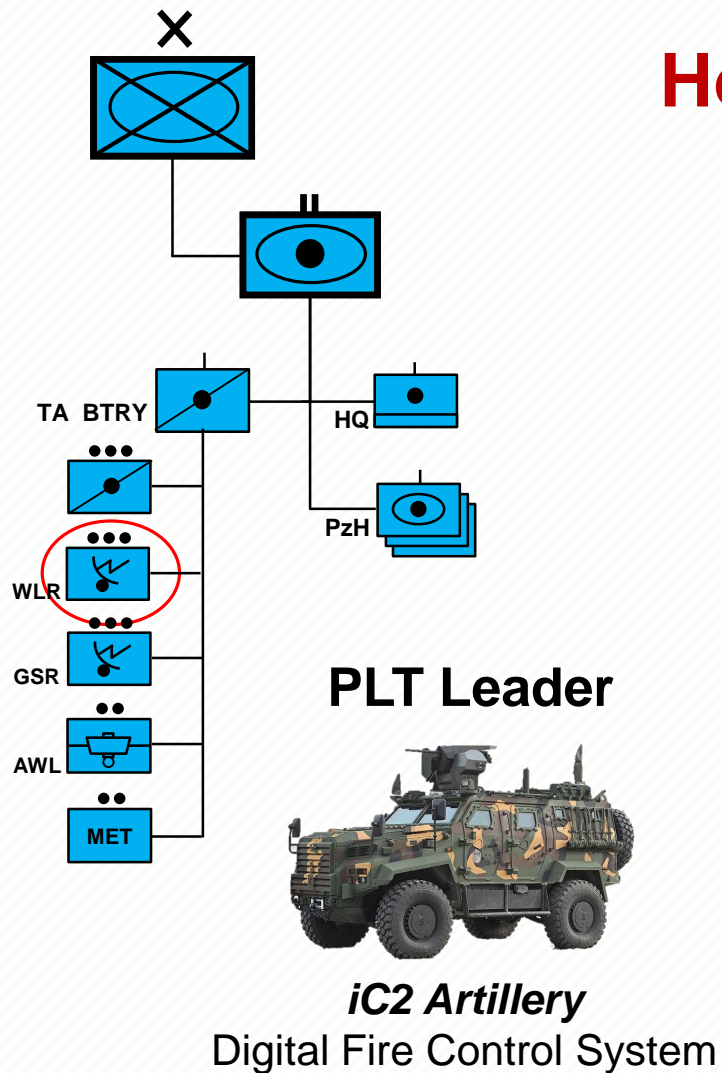
x 3



+ JFO Equipment

GONIO LIGHT  
(JIM LR + VECTOR 23)

## Hostile Weapon Locating Radar Platoon



### TA Ranges:

- Heavy mortars: 60 km
- Tube artillery: 60 km
- Rocket artillery: 90 km

### Operation Modes:

- Air Surveillance
- Hostile Weapon Locating
- Combined
- Friendly Fire Ranging

### Medium - Multi Mission Radar (ELM – 2084)

3 x



## Moving Target Acquisition Platoon

Integrated Target Acquisition Platform



x 4

### Technical Parameters

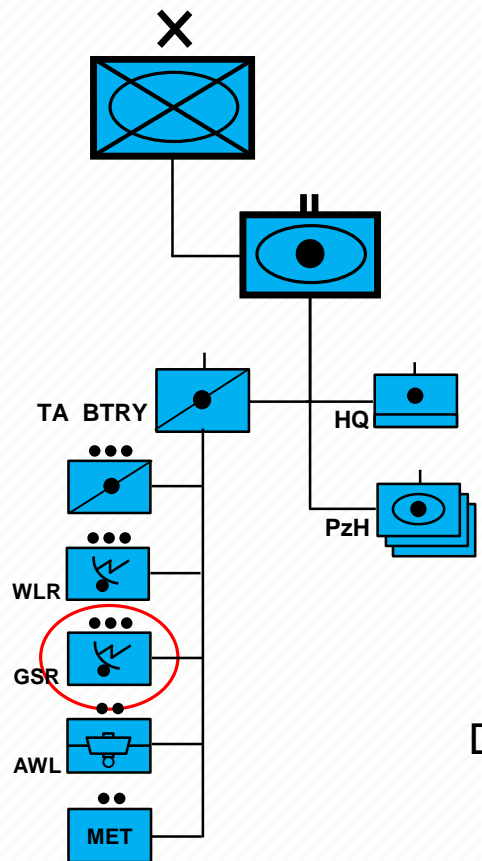
- Multispectral camera: 10 km
- Ground Surveillance Radar: 24 km

### PLT Leader



### iC2 Artillery

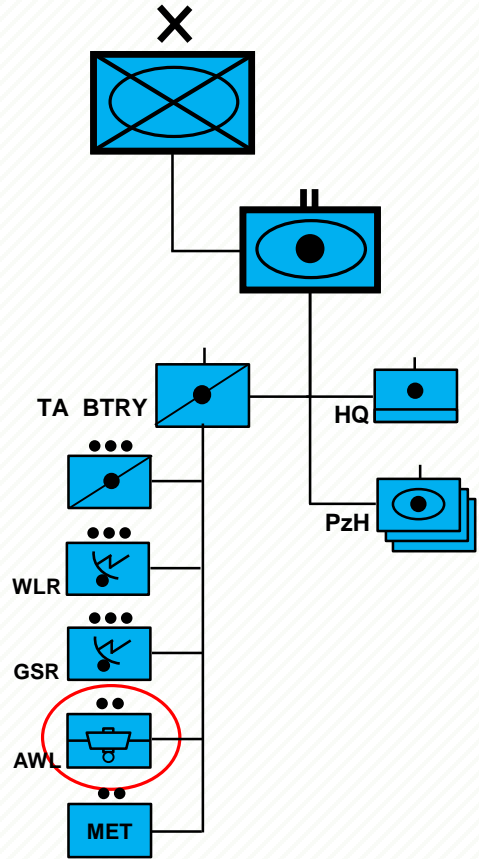
Digital Fire Control System



+ JFO Equipment

GONIO LIGHT  
(JIM LR + VECTOR 23)

## Acoustic Weapon Locating Section



Section Leader

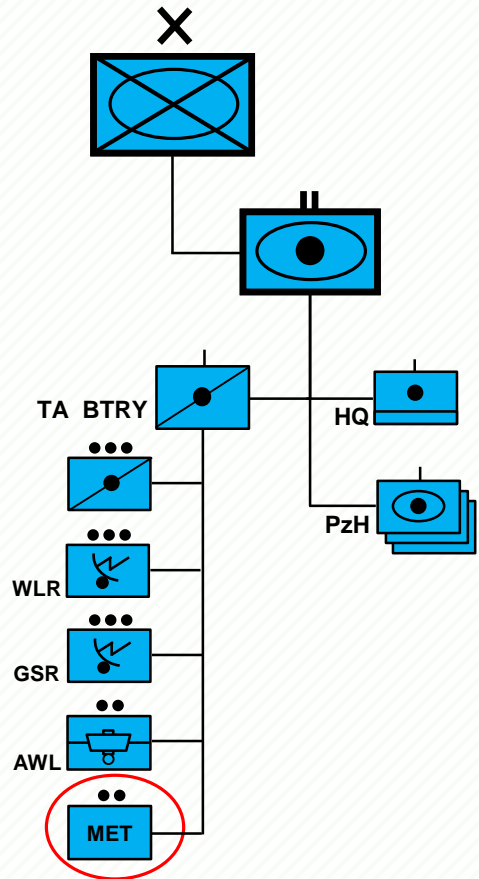


*iC2 Artillery*  
Digital Fire Control System

**NOT DECIDED YET**



## Meteo Section



### Technical Parameters

- Small balloon: 20 km
- Medium Ballon: 25 km
- Large balloon: 30 km

### Tracking Modes

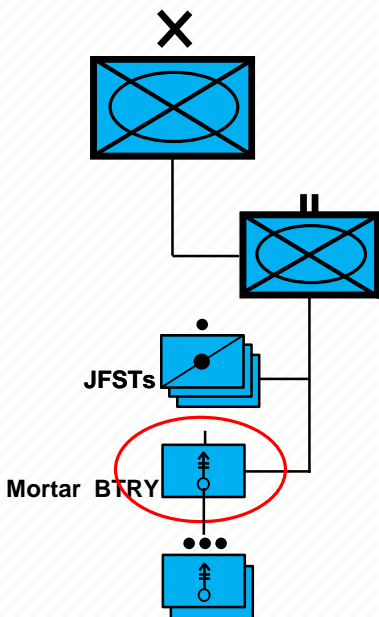
- GPS
- Radar

3 x

## VAISALA MW32 Sounding System



## Self-propelled Mortar Battery



### Technical Parameters

- Caliber: 120 mm
- Firing range: 10 km
- Rate of fire: 10 Rnds/min
- Ammunition:
  - HE
  - SMOKE
  - ILLUM
  - SMART
- MRSI (up to 6 rnds.)
- Direct Fire Capability

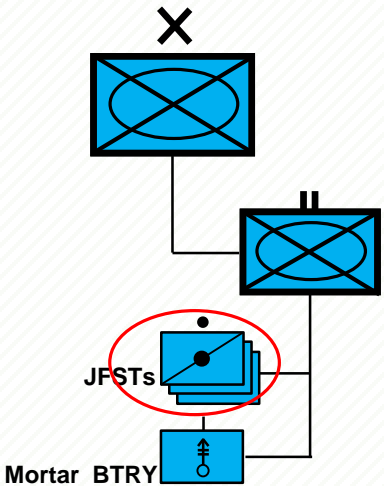
### Lynx KF41 (IFV) + Patria NEMO (Mortar)

8 x



# DIRECT SUPPORT (MECH INF BDE, MECH INF BN)

## Joint Fire Support Teams



### Technical Parameters

- Multispectral camera: 10 km
- Ground Surveillance Radar: 24 km

3 x



+ JFO  
Equipment

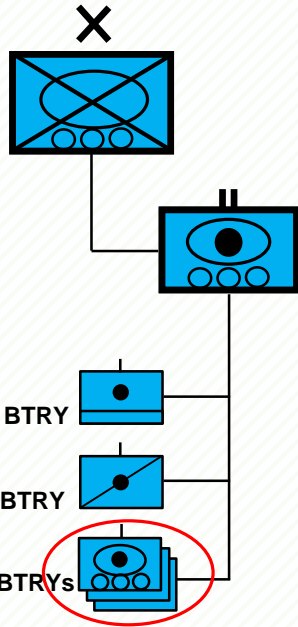
GONIO LIGHT  
(JIM COMPACT + VECTOR 23)

- Historical review
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# DIRECT SUPPORT (MEDIUM INFANTRY BDE)

## Wheeled Self-Propelled Howitzer BN



.....etc.

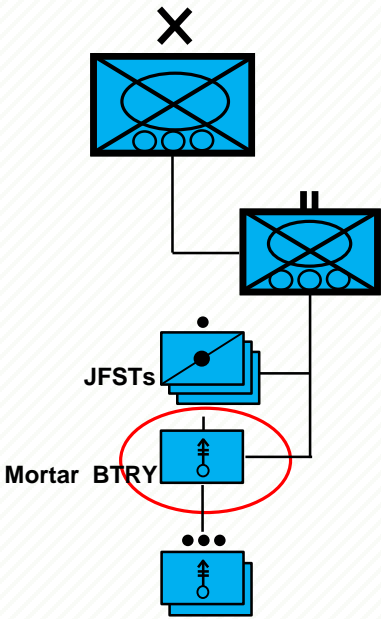
**NOT DECIDED YET**

Long Term Plans



# DIRECT SUPPORT (MEDIUM INF BDE, INF BN)

## Self-propelled Mortar Battery



Mortar System is  
**NOT DECIDED YET**

Long Term Plans

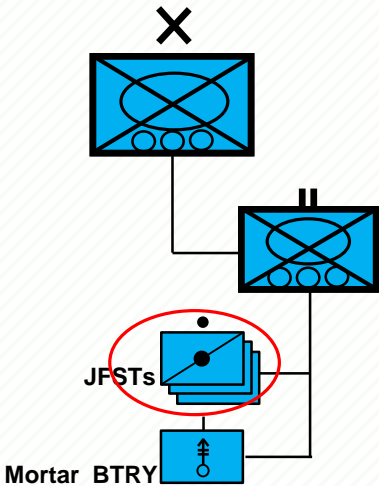
8 x

### GIDRÁN 4x4 + Mortar



# DIRECT SUPPORT (MEDIUM INF BDE, INF BN)

## Joint Fire Support Teams



### Technical Parameters

- Multispectral camera: 10 km
- Ground Surveillance Radar: 24 km

Integrated Target Acquisition Platform



3 x



+ JFO  
Equipment

GONIO LIGHT  
(JIM COMPACT + VECTOR 23)

# GENERAL SUPPORT

- Long Range - Multiple Launch Rocket System (Battalion size)
  - Targeted ranges: 35 km, 150 km, 300 km
  
- Medium-altitude long-endurance (MALE) UAV
  - Endurance: ~ 30 hrs.
  - Payload: ~ 400 kg

**NOT DECIDED YET**

Long Term Plans

# AGENDA

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# LOITERING MUNITIONS

## Technical Parameters

- Range: 60 km
- Endurance: 60 min
- Weight: 14,5 kg
- Warhead: 4,5 kg

## HERO 120



## Technical Parameters

- Range: 150+ km
- Endurance: 120 min
- Weight: 50 kg
- Warhead: 8 kg

## HERO 400





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**„SLOW fire support is better than  
NO fire support”**

## Keeping the *Old school* knowledge

- Digitalization stops us thinking
- Understanding and training the **basics of artillery**
- Maintaining manual **survey** skills
  - Positioning
  - Installation of survey control points
  - Installation of navigation control points
- Manual **fire element calculation**
- Manual **gun laying**

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# OPPORTUNITIES FOR COLLABORATION

- Target date for ASCA membership is MARCH 2025  
*(Artillery Systems Cooperation Activities, ASCA)*
- Digital Fire Control System (iC2 Artillery) with ASCA opens the horizon for participation in wide variety of Multi National CPXs and LFXs





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Q&A

