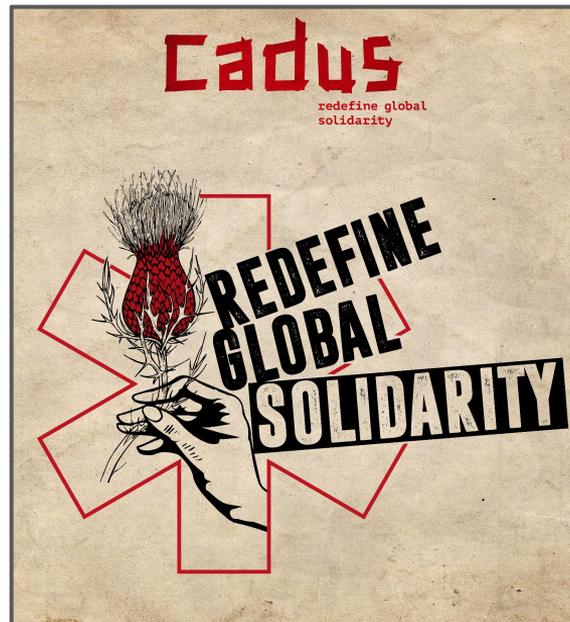


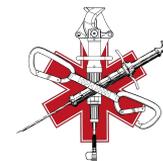
## BUS

1. Cover
2. The Problem
3. Intent
4. The Solution
5. Distance
6. Off the shelf
7. Modes
8. Patient Treatment Units
9. Equipment
10. Layout
11. Details 1
12. Details 2
13. Details 3
14. Details 4
15. Who is CADUS?
16. What we need



About the motif:

The thistle (lat. *carduus*) is a special symbol to us and patron for our name. It is a medicinal and pioneer plant in one, grows even under poor conditions and prepares the ground for other plants. It is defensive and with its flowers beautiful at the same time. It can also be found almost everywhere in northeastern Syria, where we have been active since our foundation in 2014.

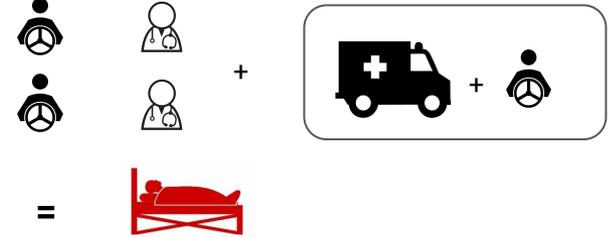




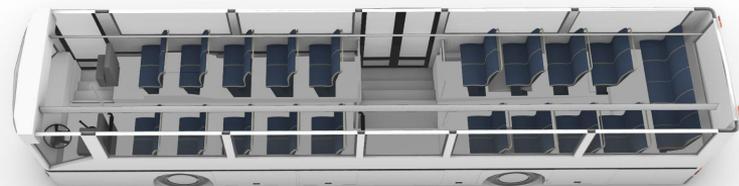
There are not enough ambulances and medical personnel in conflict zones.

5 staff and 2 vehicles are required to transport

1 patient



The intent is to create an open source system to convert buses into ambulances as buses are in ready supply in most parts of the world.

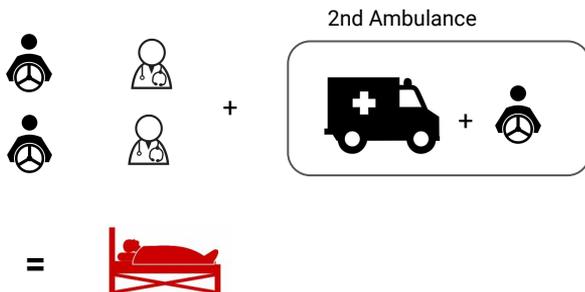


These buses are not expensive custom buses imported from afar but something existing on the ground that can be refitted at low cost and as needed as crisis unfolds

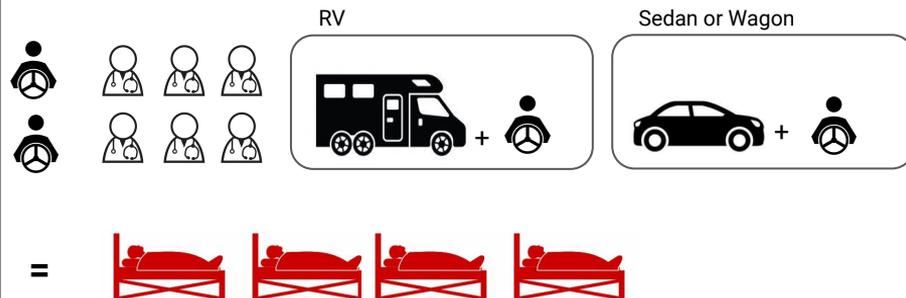




AMBULANCE = **5** Staff for **1** Patient

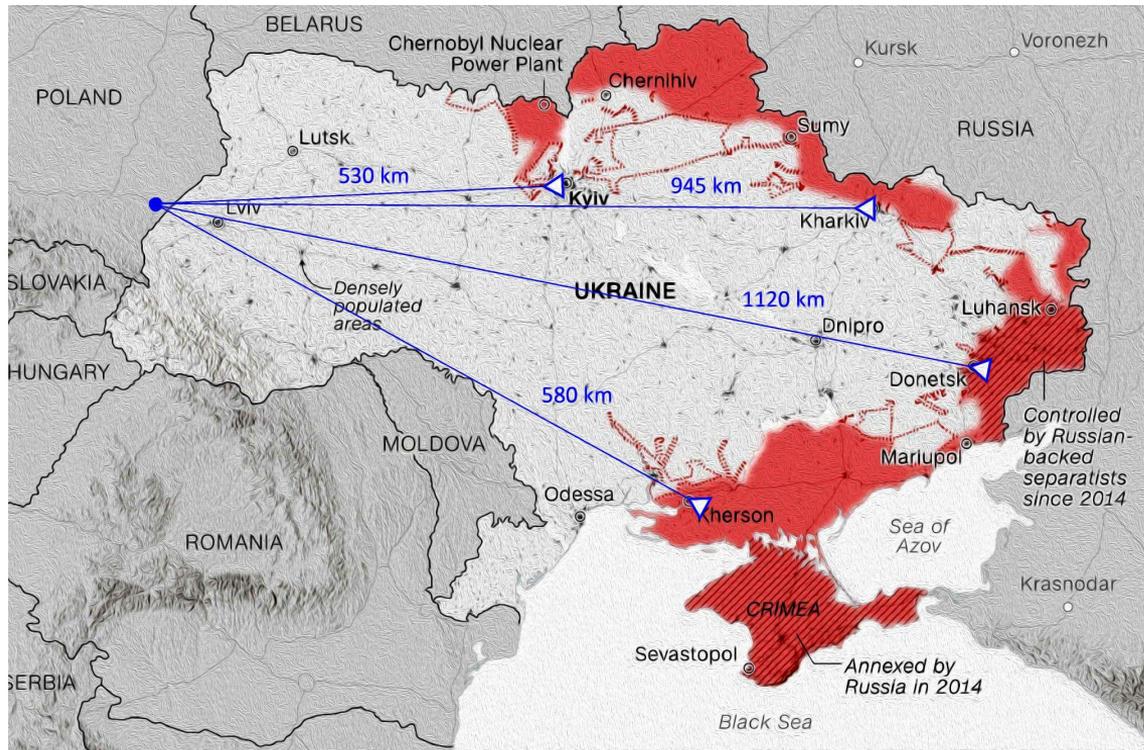
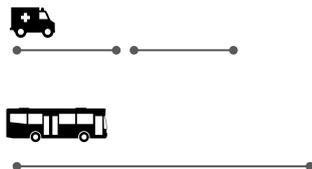


BUS = **2.5** Staff for **1** Patient



In the Ukraine distances are vast

A bus is built for these sorts of distances and has a greater range than an ambulance



A variety of Off the Shelf Ambulance buses exist ranging from \$105K USD without equipment however these units are generally assigned specific uses in first world countries and may not be equipped or available for conflicts or crisis

Many countries many not be able to afford to have these buses standing by and it can take time to relocate a bus to a conflict zone

The Mobile Makers Space has the ability to convert an existing bus on the ground and fit it out with the necessary medical equipment much more inexpensively and to respond to the conflict or disaster wherever it may happen as it happens



ted into an ambulance ...



Mass Casualty Evacuation Ambulance Bus ...  
de.gta5-mods.com



Emergency Vehicles: FD / EMS / PD ...  
youtube.com



Ambulance bus | This large ambulance is ...  
flickr.com



Mobile Ambulance Buses Are a BIG Hit ...  
firefighternation.com



Ambulance Isuzu in (2).JPG  
elbahouse.com



ORNGE now using ambulance buse to ...  
ottawa.ctvnews.ca



Ambulance bus hi-res stock photograp...  
alamy.com



ulance Bus MAB, manage...  
com



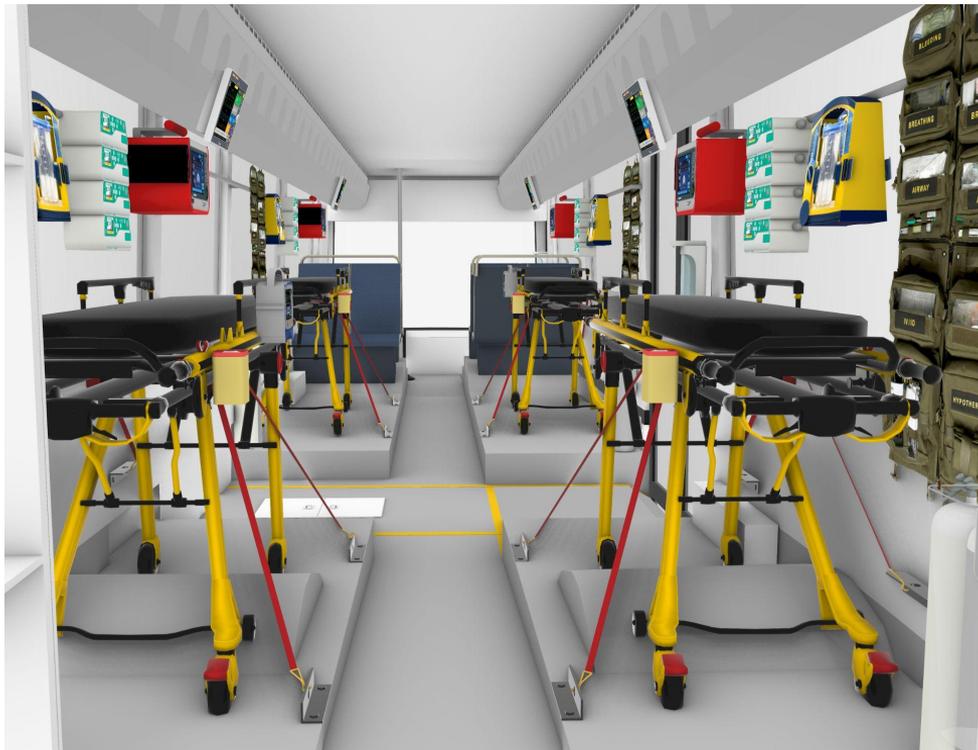
Mercedes-Benz Buses  
mercedes-benz-bus.com



Toronto EMS ESU2 bus responding - YouTube  
youtube.com



Old school buses converted to ...  
wusa9.com



### 1/ ICU MODE



Act as a mobile ICU in conflict situations

$$\begin{aligned}
 & \text{Driver icon} \times 2 + \text{Nurse icon} \times 6 + \text{Ambulance icon} + \text{Car icon} \\
 & = \text{Patient bed icon} \times 4
 \end{aligned}$$

### 2/ TRANSPORT MODE



Move injured patients

$$\begin{aligned}
 & \text{Driver icon} \times 2 + \text{Nurse icon} \times 6 + \text{Ambulance icon} + \text{Car icon} \\
 & = \text{Patient bed icon} \times 4
 \end{aligned}$$

### 3/ CARE MODE



Act as a ward for patients in need of care

$$\begin{aligned}
 & \text{Nurse icon} \times 4 \\
 & = \text{Patient bed icon} \times 4
 \end{aligned}$$

A Patient Treatment Unit is the equipment needed to treat a single patient.

**Defibrillator**



Zoll X Series

**Monitor**



Bistos BT-770

**Ventilator**



Hamilton T1

**Equipment Pack**



Tasmanian Tiger Medic transporter

**Stretcher**



Stryker 6100 M1

**Injection Pump**



Braun Compact

**Suction Pump**



Laerdal Suction

**ECG**



Edan SE3

Treatment

PATIENT  
TREATMENT UNIT

PATIENT  
TREATMENT UNIT

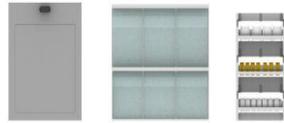
PATIENT  
TREATMENT UNIT

PATIENT  
TREATMENT UNIT

Medical Equipment



Sanitizer    Gloves    Sharps disposal



Vitrifigo FG 10    Equipment compartments    Tapes and bandages

Water In/ out



Adjustable tap    Sink



Black water tank    Fresh water tank

Basic office



Whiteboard



Computer

Lifting Equipment



Rescue Pulleys

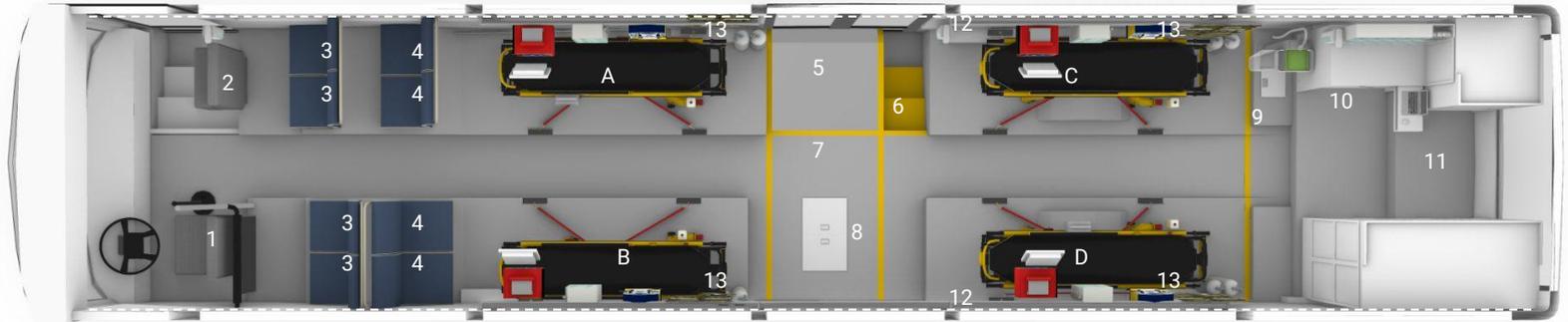


- 1/ Driver 1
- 2/ Driver 2
- 3/ Passengers or patients
- 4/ Medics
- 5/ Loading Ramp
- 6/ Stairs

- 7/ Turning circle/ Lift System
- 8/ Dry garbage Disposal
- 9/ Black Water disposal and Sink
- 10/ Prep Station
- 11/ Storage

- 12/ Overhead handholds (Indicated by -----)
- 13/ Equipment poles

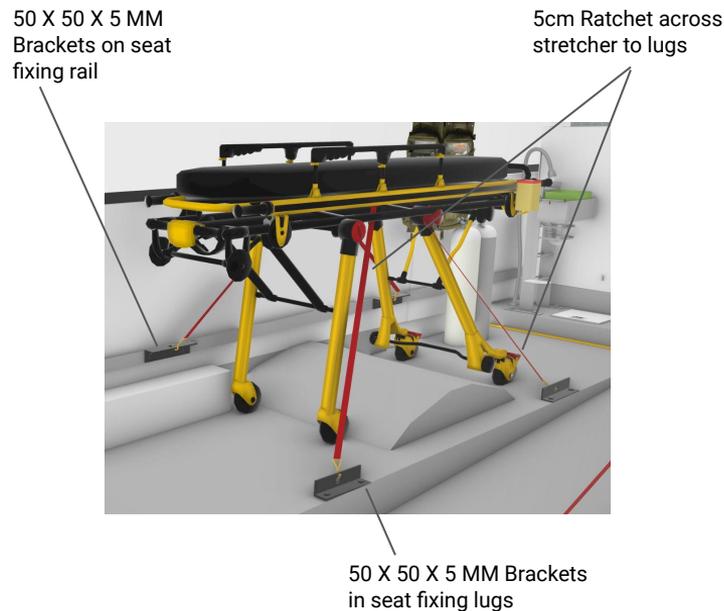
ABCD/ EMT Modules



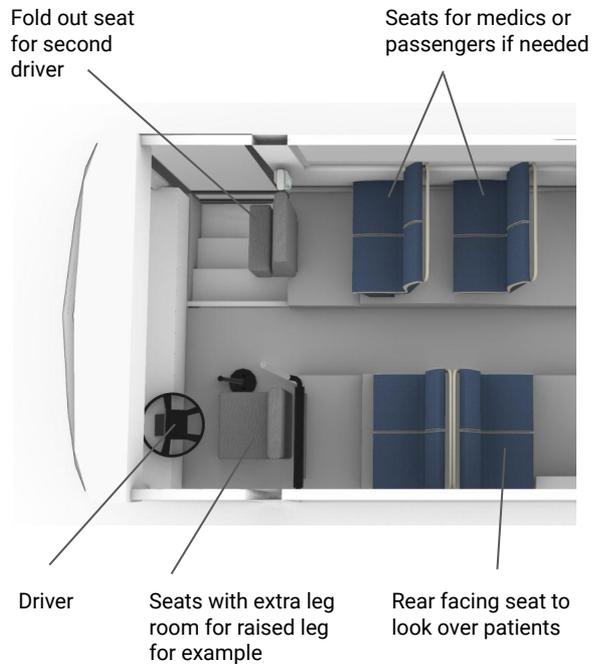
**PATIENT RAMP**



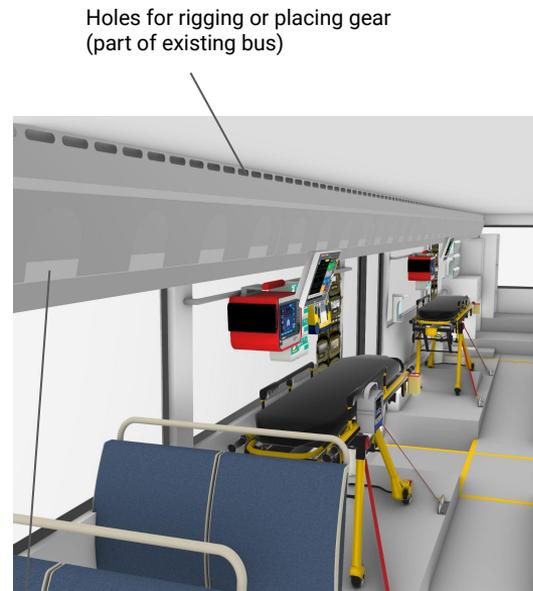
**SECURE STRETCHER**



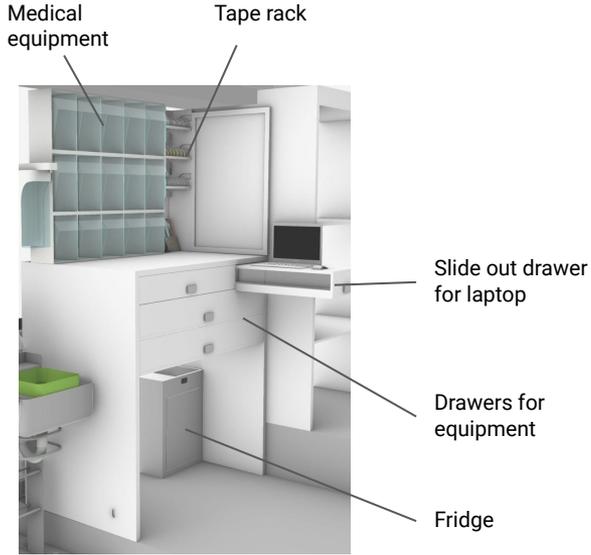
SEAT PLAN



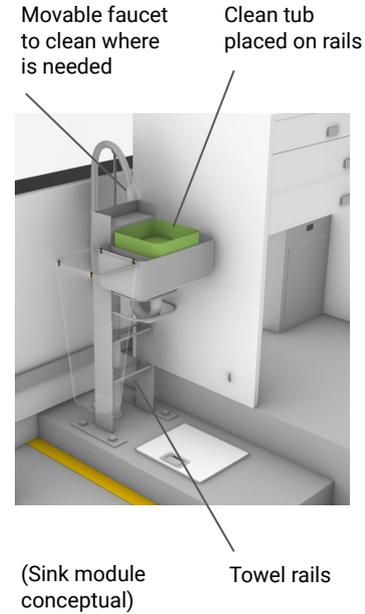
OVERHEAD HOLDS



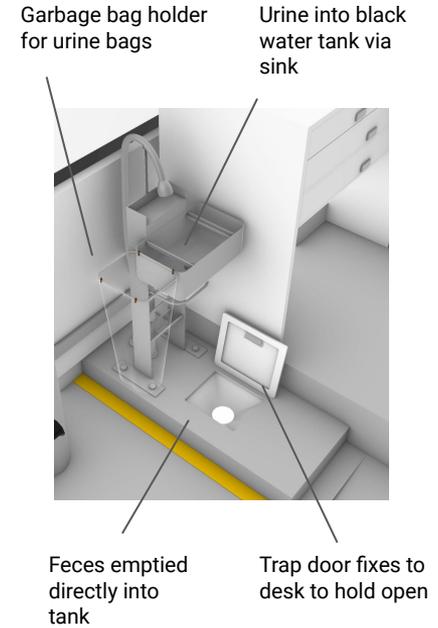
PREPARATION STATION



WATER INTERFACE CLEAN



WATER INTERFACE DIRTY



**STORAGE**

6 x (420 x 420 x 700)  
Storage compartments to  
suit field kit bags



2 x (420 x 420 x 700)  
Storage compartments to  
suit field kit bags



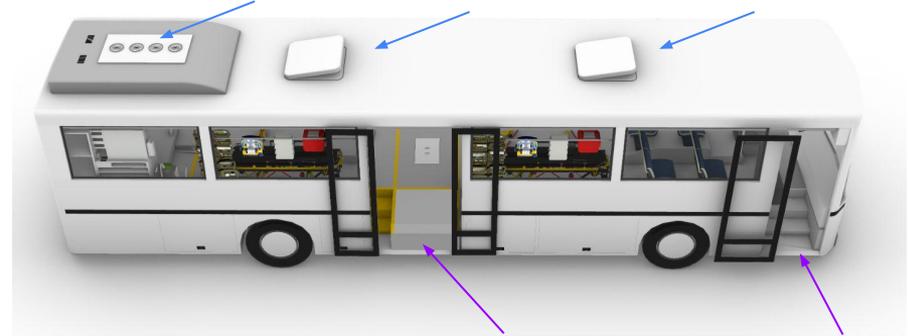
4 x Whiteboards for EMT  
modules ABCD

**VENTILATION**

Ventilation when  
moving  
connected to the  
AC system

Ventilation when  
moving

Ventilation  
when  
moving



Ventilation when  
stationary

Ventilation  
when  
stationary

CADUS works in medical and technical emergency and disaster relief to lead people in crisis and disaster areas out of life-threatening situations and to enable healthy, safe and self-determined living conditions on site.

Effective cooperation, Interdisciplinarity and critical reflection of current NGO practice, as well as early involvement of local communities, are among the core values of CADUS.

From doctors to hackers to technicians, over 300 volunteers have contributed to CADUS' development into an international NGO that takes new approaches to humanitarian work.

In the meantime, CADUS has been able to actively contribute to supporting people in crisis situations in 11 countries. Since March 2022 CADUS is responding as Emergency Medical Team in Ukraine.



<https://www.cadus.org/en/about-us>.

We are very conscious of where your money goes. Your donation will help with these following areas

### **PARTNERS**

We are looking for financial and supplier partners to actualize these buses around the world

### **BUS DONATION**

\$65 K USD will allow the fit out of an entire bus including bringing in specialized staff to oversee the refit of the bus with the help of volunteers

### **EMT MODULE DONATION**

\$50 K USD will create buy an EMT Module with all the equipment to treat one patient

### **MEDICINE**

Donations are needed for medical supplies.

