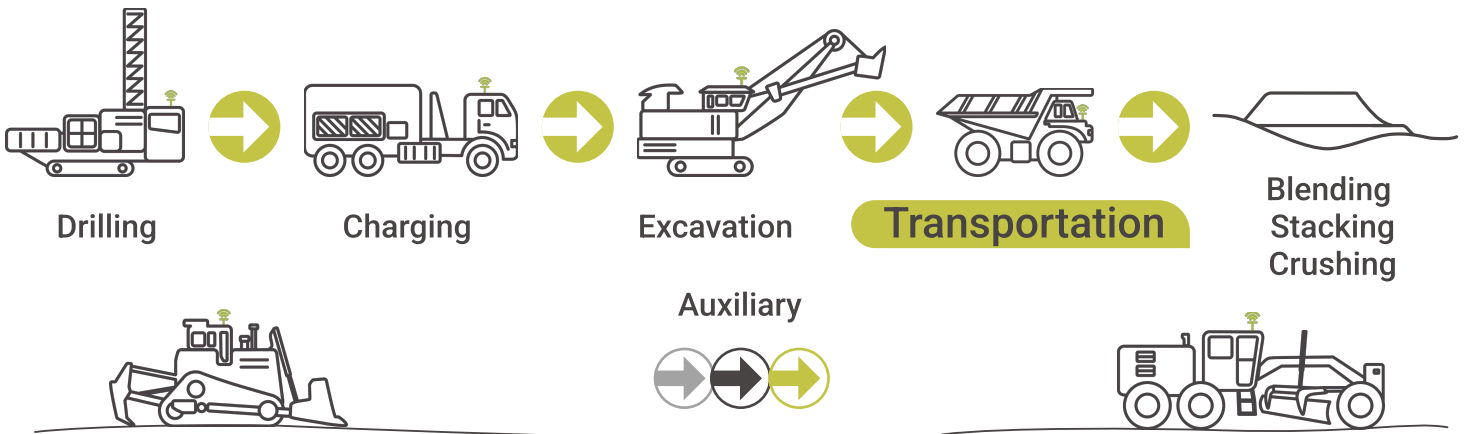


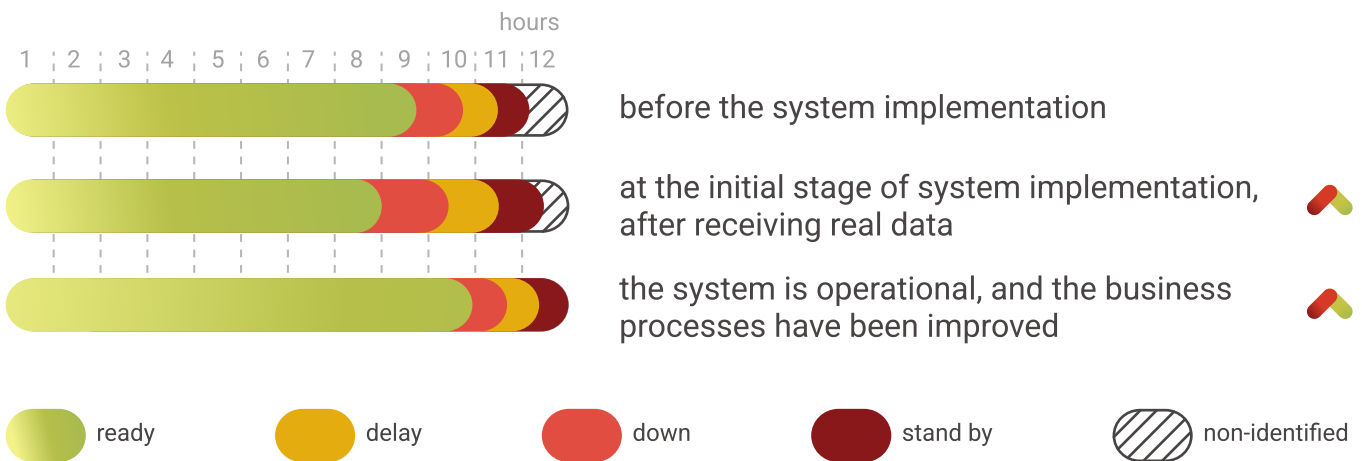
# FLEET MANAGEMENT SYSTEM AUXIL



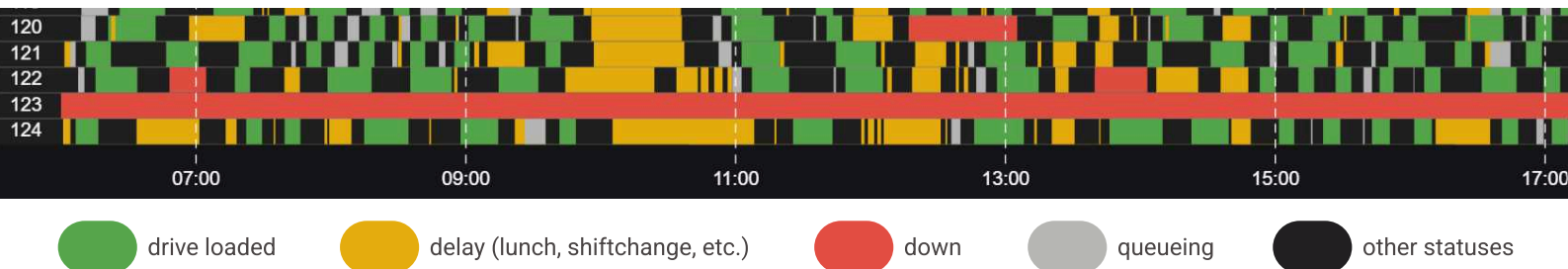
## PURPOSES

- Reducing truck downtime and increasing equipment utilization rates through automated monitoring, improved personnel discipline, and management of scheduled downtimes
- Improving the efficiency of the haulage cycle through automated truck assignment management to achieve planned targets
- Automated material blending, reducing instances of incorrect arrivals at dumping locations
- Reducing costs through monitoring actual loading, decreasing fuel consumption, and increasing tirelife

### Trucks calendar time distribution



### TRUCKS CYCLOGRAM



# AUXIL INTERFACE



**SOS**  
16:46  
Cycles:7

Menu Arrive To: Dump 5  
In: 7 min.

Truck operator

47-101 - Fatih  
Reason:Uretim  
Speed:21.7 km/h  
Weight:135.3 t  
Fuel:1549.0 l  
Latest Data:10-01-2025 01:22:24  
Buffer Size:0  
Material SC  
From: 46-202  
To: Ana

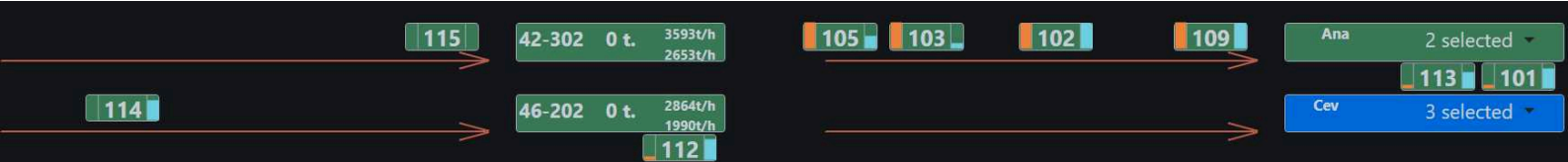
Dispatcher

**SOS**  
13:28  
Cycles:8

Operator Kam  
Equipment 47-114  
State READY from 12:32 (55 min.)  
Reason READY  
GPS: Speed 12.39 km/h  
Fueling 1569l. Weight 157.9 t.  
Tires pressure 124 125 129 124 127 124

Menu Arrive To: Ana  
In:-5 min. SC

Truck operator

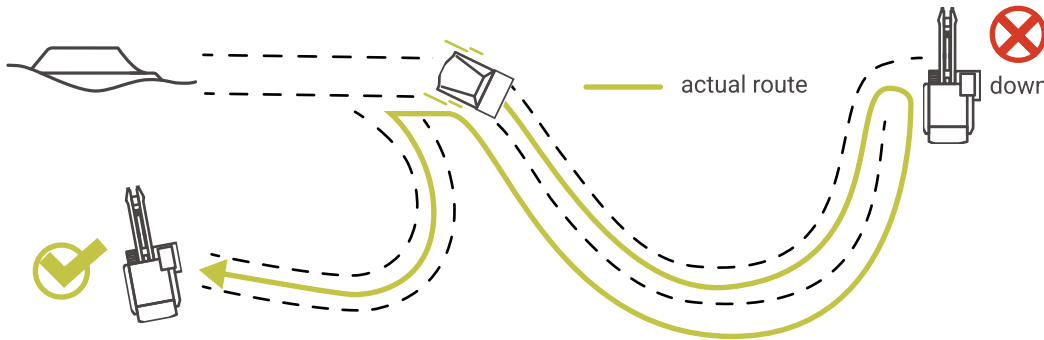


The dispatcher managing the movement of trucks to excavators and unloading points



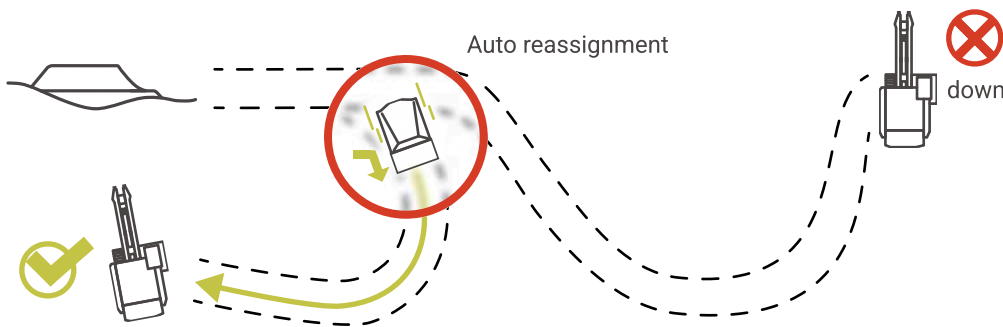
Monitoring and management in real-time

## REASSIGNMENTS FROM AN UNAVAILABLE EXCAVATOR



If the excavator is unavailable, the truck will experience undesirable empty travel

No system



With AUXIL

The system will recalculate the current optimal assignments for trucks if an excavator becomes unavailable



Automatic data collection and analytics

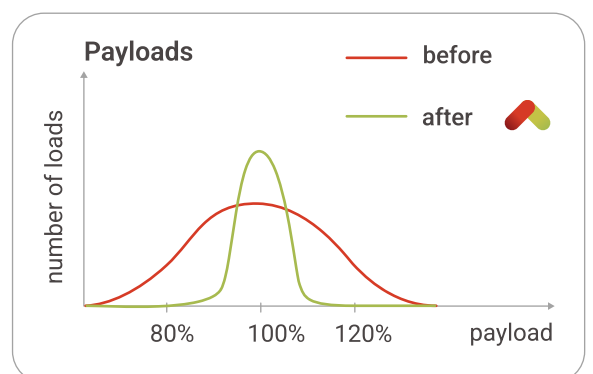
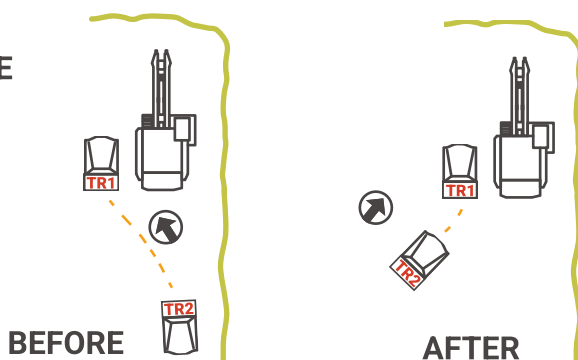


Any kind of downtime will be recorded



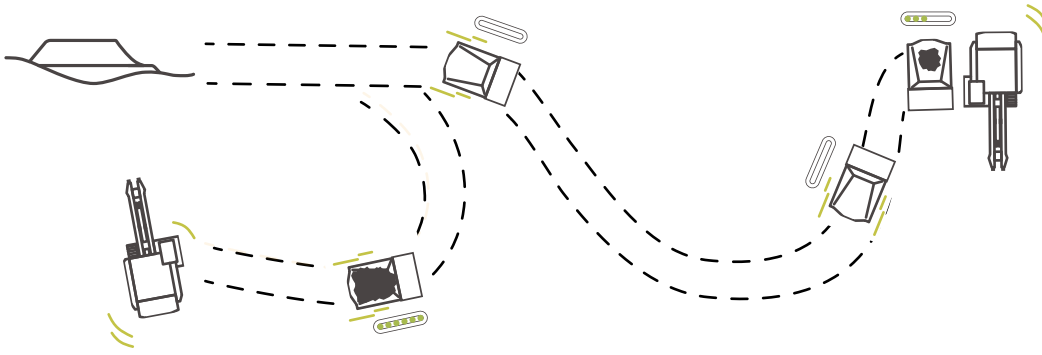
Remote payload control

## SHORTER SPOTTING TIME



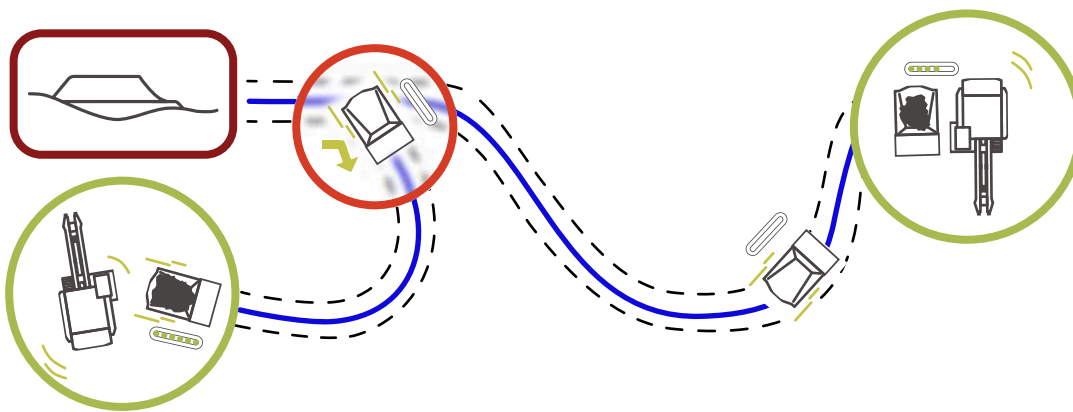
## REASSIGNMENTS TO ELIMINATE QUEUES

- ➔ The reassignment algorithm operates in all possible scenarios occurring in the pit
- ➔ Management of truck operations both in the haulage cycle and during downtimes



Without automated assignments, trucks often idle in queues

No system

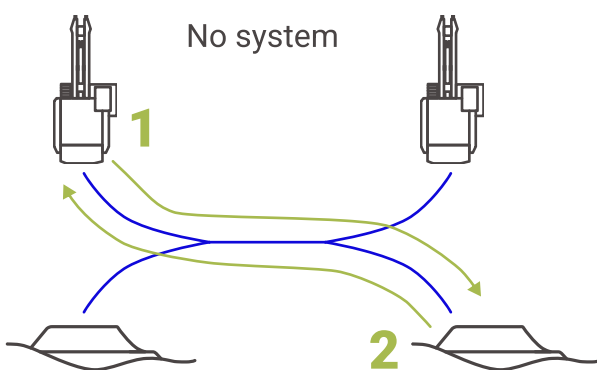


With AUXIL 

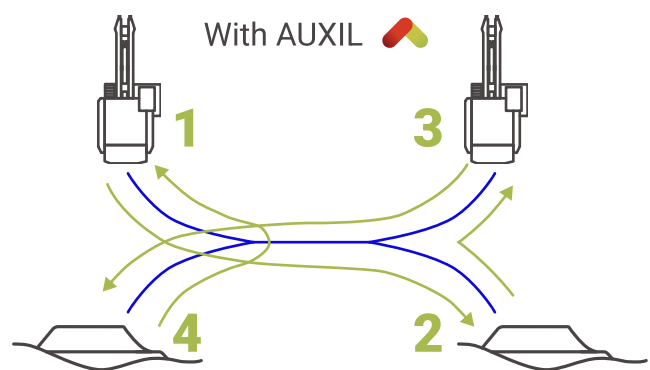
The system automatically reassigns trucks based on the current situation in the mine to enhance material haulage efficiency

## EMPTY RUNNING KPI

- ➔ The distribution of trucks based on priorities and automatic reassignments will reduce empty mileage



empty haulage ratio **1**



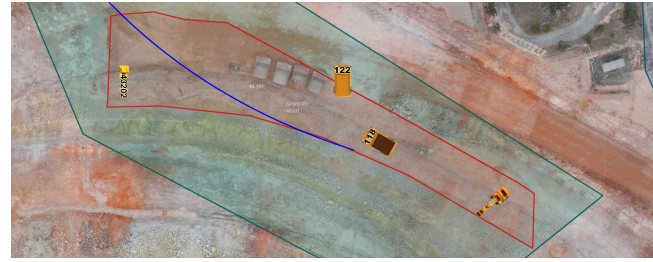
empty haulage ratio **0,8**



Route compliance will be monitored by the system instead of a human. The system will notify the dispatcher of any deviations in the haul truck routes and log these deviations into the database



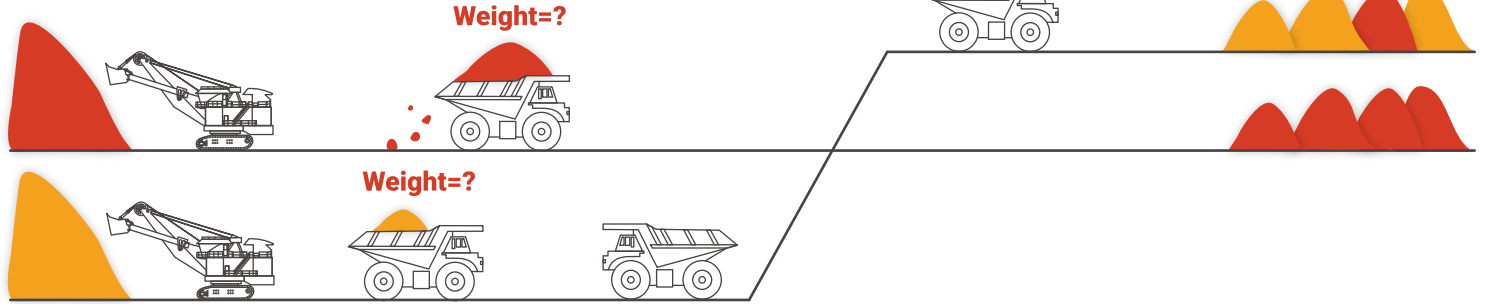
To improve the efficiency of truck payload utilization, data from weighing systems will be used. This will reduce the number of overloads and underloads



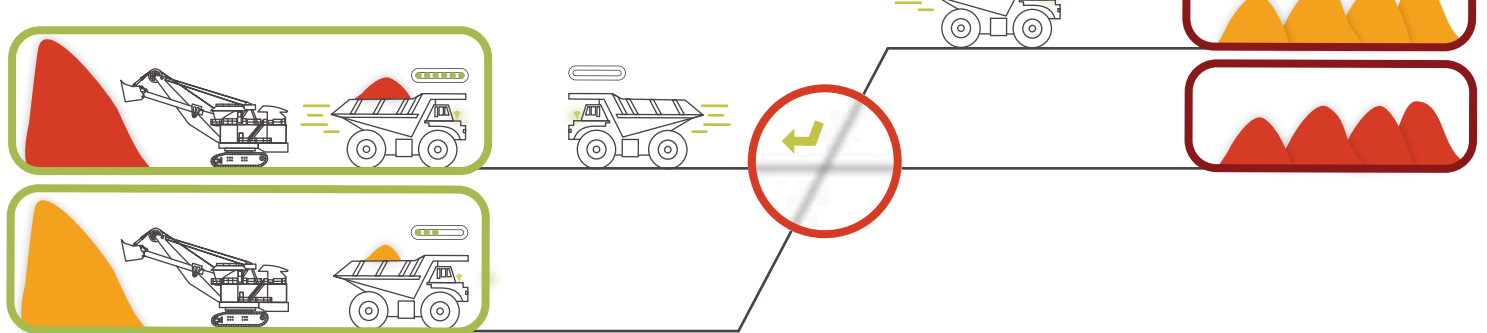
Mine map with equipment and locations

## ROUTES. MATERIALS MANAGEMENT

No system



With AUXIL



## COMPONENTS

- Equipment with IP65 protection rating and vibration protection - onboard computer, antennas.
- Wi-Fi, LTE, 5G support.
- Integration with onboard systems of trucks for reading the telemetry and performance indicators.
- Software for the server and the onboard devices.



Hardware on the unit



Server



Clients

## MINING ART – YOU PAY THE VALUE ONLY

- **Availability** - We use hardware in our solutions that are openly available on the market, which reduces the overall project cost and simplifies subsequent maintenance.
- **Reliability** - All equipment comes with a manufacturer's 1-2 years warranty. Our software meets 99.9% SLA requirements.
- **Flexibility** - Our software is open to modifications tailored to your business needs. You can make adjustments independently.
- **Transparency** - Forget about subscription fees for technical support and services. You pay for the provided services only.
- **Experience** - Since 2015, we have been developing and implementing our own software solutions for the mining industry.