



4G^{LTE}



SMART HELMET[®]

INTELLIGENT TRACKING SYSTEMS

Powered by Globax Technology
www.smarthelmet.uk

PERSONNEL TRACKING

PRODUCTIVITY

HEALTH AND SAFETY



GLOBAX TECHNOLOGY LTD



www.smarthelmet.uk





ABOUT US



Globax Technology Ltd is an international leader in developing RFID systems and RFID solutions. We work with various industries including manufacturing, retail, apparel, legal services, hospitality, healthcare, construction, logistics and automotive. Headquartered in the United Kingdom, we operate on a global scale. Our international experience coupled with our vision has led us to be one of the most trusted RFID providers in the world. Established in 2015, Globax Technology Ltd has quickly risen to provide RFID solutions in over 35 countries worldwide.

Partnered with the most acknowledged system integrators in Europe, the Middle East, South America and Africa, Globax Technology Ltd has a global channel network to provide a local presence and support to our customers.

We provide RFID systems that streamline complex business operations including asset tracking, materials management, event management, inventory control, document tracking, automated vehicle identification, and more. Globax Technology Ltd delivers best-in-class RFID products and solutions that will revolutionize your productivity, enhance your security, minimize risk, and control assets.





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PROBLEM

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Health and Safety in Numbers in the United Kingdom 2017/2018



1.4
million

Work-related ill health cases
(new or long-standing) in 2017/18

Source: Estimates based on self-reports from
the Labour Force Survey, people who worked
in the last 12 months



0.6
million

Work-related stress, depression
or anxiety cases (new or long-
standing) in 2017/18

Source: Estimates based on self-reports from
the Labour Force Survey, people who worked
in the last 12 months



0.5
million

Work-related musculoskeletal
disorder cases (new or long-
standing) in 2017/18

Source: Estimates based on self-reports from
the Labour Force Survey, people who worked
in the last 12 months



9.7
billion

Annual costs of new cases of
work-related ill health in 2016/17,
excluding long latency illness
such as cancer

Source: Estimates based on HSE Costs to
Britain Model



0.6
million

Non-fatal injuries to workers
in 2017/18

Source: Estimates based on self-reports from
the Labour Force Survey



71,062

Non-fatal injuries to employees
reported by employers in 2017/18

Source: RIDDOR



144

Fatal injuries to workers in 2017/18

Source: RIDDOR



5.2
billion

Annual costs of workplace injury
in 2016/17

Source: Estimates based on HSE Costs to
Britain Model



30.7
million

Working days lost due to work-
related ill health and non-fatal
workplace injuries in 2017/18

Source: Estimates based on self-reports from
the Labour Force Survey



12,000

Lung disease deaths each year
estimated to be linked to past
exposures at work

Source: Counts from death certificates and
estimates from epidemiological information



2,595

Mesothelioma deaths in 2016,
with a similar number of lung
cancer deaths linked to past
exposures to asbestos

Source: Counts from death certificates and
estimates from epidemiological information



15.0
billion

Annual costs of work-related
injury and new cases of ill
health in 2016/17, excluding long
latency illness such as cancer

Source: Estimates based on HSE Costs to
Britain Model



Globax, born as a result of customer demand to resolve problems experienced by companies when tracking the safety, security and productivity of personnel on site and in the workplace.

Measuring and monitoring the efficiency of in-house systems and productivity of personnel, whilst helping prevent workplace accidents and ensuring a quick response in the event of an accident can ensure sustainable and effective growth for larger companies.

PERSONNEL TRACKING

PRODUCTIVITY

HEALTH AND SAFETY

RTLS SYSTEMS FOR THE INDUSTRY

Next generation Industrial IOT, RTLS, and wireless tracking RFID solutions.





WHAT IS SMART HELMET ?

Smart helmets are wearable devices that combine traditional protective headgear with cutting-edge technology. These helmets integrate features like sensors, cameras, augmented reality (AR), and connectivity to enhance safety, improve communication, and optimize task management.



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RFID | RTLS | IOT | HSE 4.0 | INDUSTRY 4.0



AI SMART HELMET

AI SMART HELMET with integrated intelligent devices and our unique smart helmet is capable of managing the safety, monitoring the productivity and ensuring a positive sustainable growth in a large number of sectors.

These include construction, petrochemical sites, logistics, mining, heavy industry, defense industry, military facilities, energy, maritime, aviation, and cement to name a few.

SOLUTIONS

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SOLUTIONS



AI SMART HELMET

4G LTE Helmet Camera 32G



4G  **LTE**



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SOLUTIONS

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AI SMART HELMET

4G LTE Helmet Camera 32G



WIFI



4G LTE



GPS

HD

HD1080p



NIGHT VISION



Android 4.x



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SOLUTIONS

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SMART HELMET
 Powered by NAVIO VISON

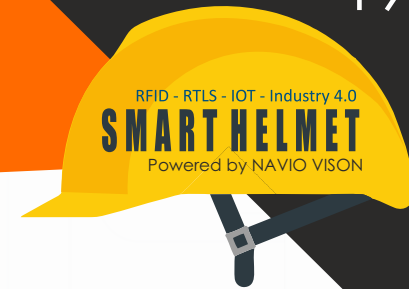


CE





SOLUTIONS



CRASH CUSHION



REMOVABLE BATTERY



ELASTIC BAND



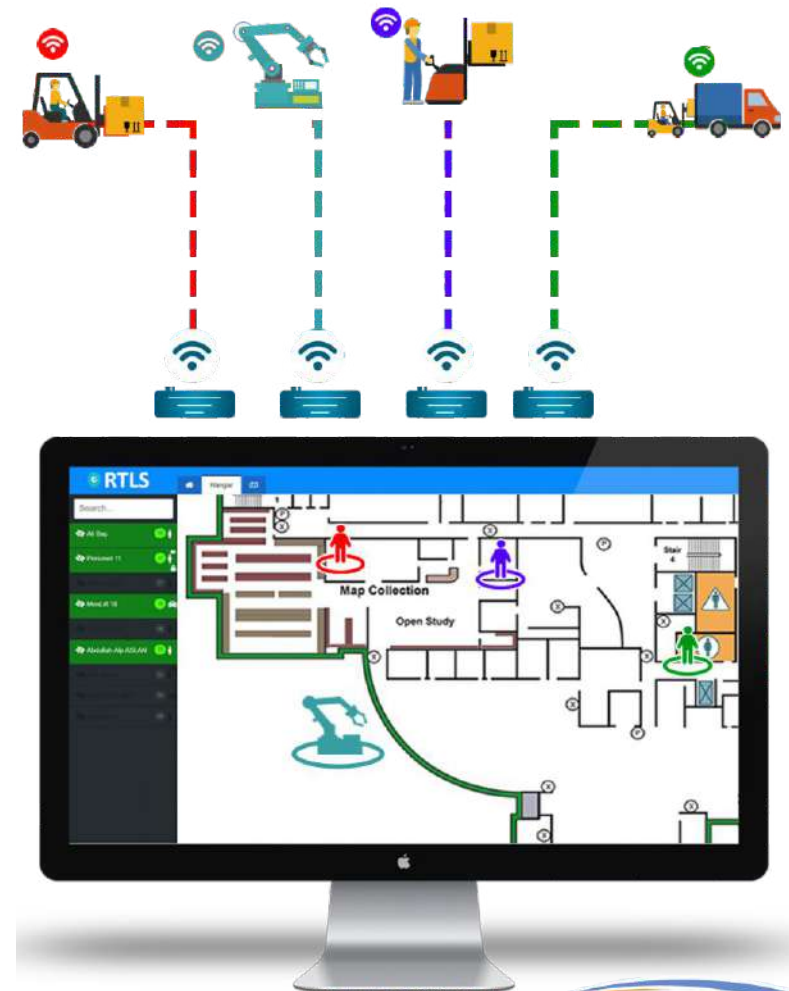
AIR VENT





WHAT IS SMRAT HELMET ?

Real-time positioning (measured with RFID-RTLS-WIFI) is a high-tech solution that enables monitoring the productivity and occupational health & safety of personnel with a precise position (down to between 60cm-1 mt).



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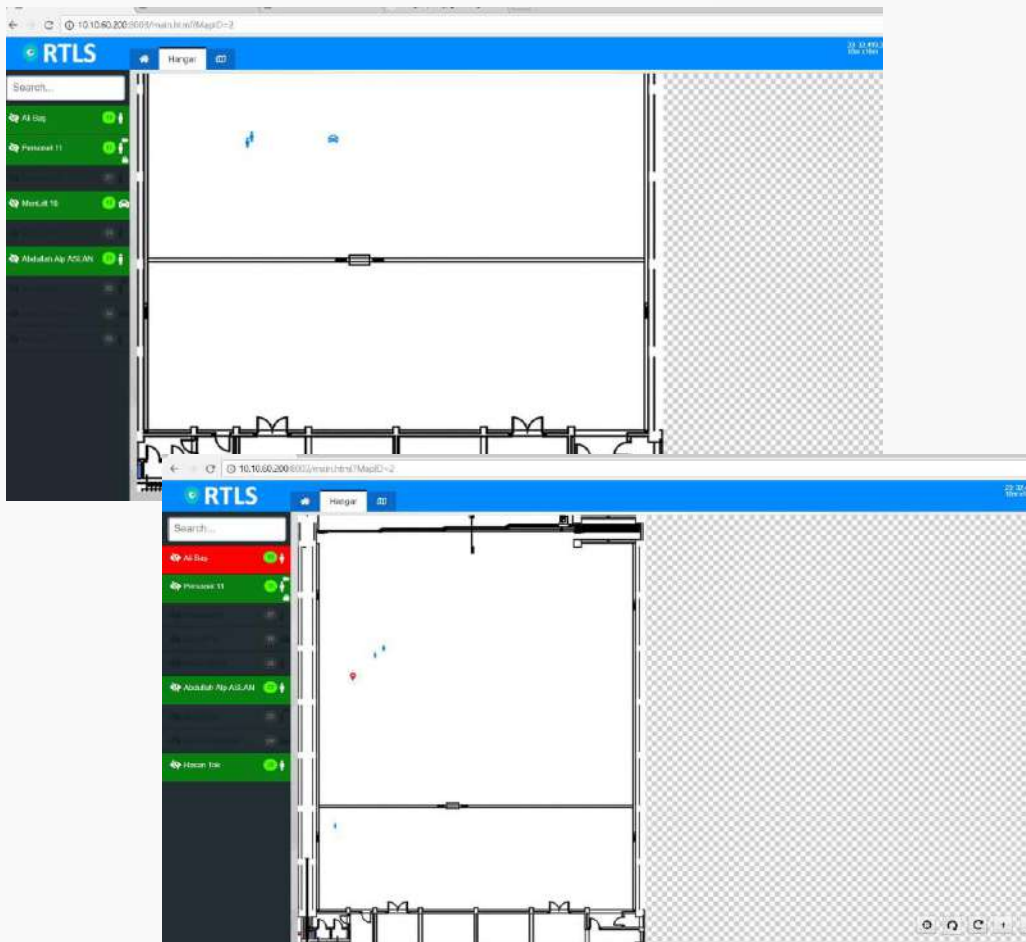




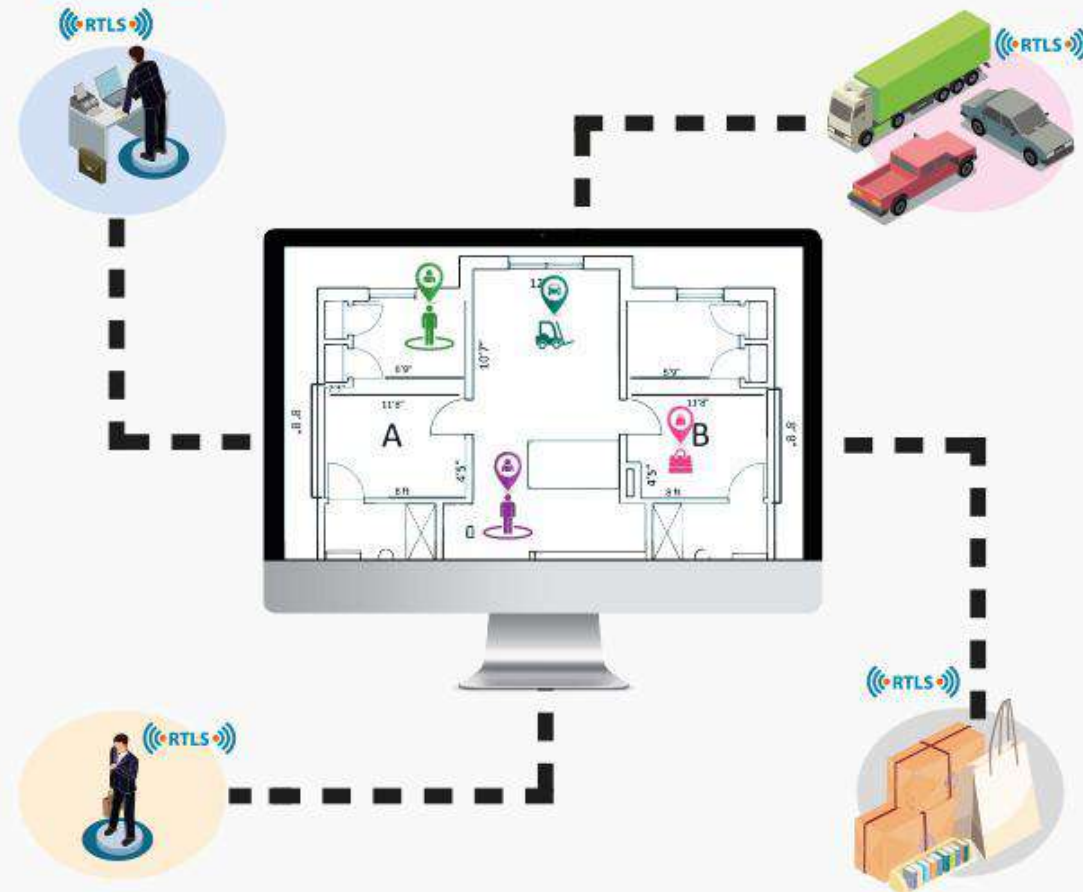
SOLUTIONS

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WHAT IS SMART HELMET ?



Real Time Location Systems





What Is an Industrial RTLS?

The industrial environment imposes high reliability and performance demands for precise indoor tracking, delivered by a real-time location systems (RTLS), that needs to meet high quality standards and provide an industry-specific feature set.

The range of indoor tracking technologies is wide, yet only Ultra-wideband (UWB) can provide the accuracy, scalability and reliability needed in process-planned production in which the cost of every minute counts. Unlike other tracking technologies, only UWB provides an accuracy of 30 cm with unrivaled reliability, even in harsh metallic environments.

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Indoor Positioning Systems Industrial Use Cases



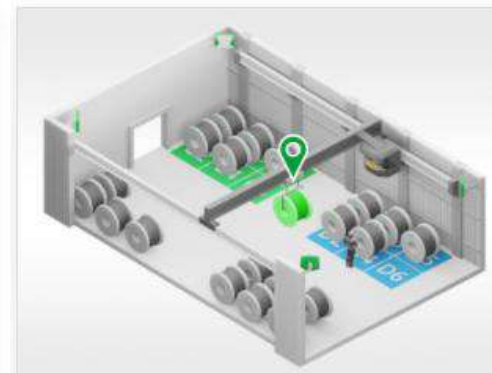
Employee Location Tracking

The top nine use cases of employee tracking for increasing people's safety and improving rescue operations.



Forklift Tracking

Nine scenarios for tracking material handling vehicles to prevent collisions and increase their utilization.



Asset Tracking

Eleven applications for tracking material handling vehicles to eliminate time-waste and increase efficiency.



eKanban

The five key benefits of replacing paper Kanban with Digital Kanban to streamline production.





SOLUTIONS

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Tag on the worker



Anchors on the wall



What Is Indoor Navigation?

Indoor Navigation helps people reach their desired location by guiding them inside buildings. It's necessity increases in unfamiliar, confusing buildings and building complexes. While GPS technology is widely used and known for outdoor navigation, there are different technologies used indoors, including Bluetooth, Wi-Fi and UWB. To make it easy to grasp and based on GPS's popularity, these are sometimes incorrectly called "Indoor GPS".

Contrary to GPS, these technologies work well indoors with higher precision and are even able to determine the actual floor level. Similar to GPS navigation, to provide indoor navigation, the indoor positioning system needs to have the real-time location of the person, a mapping image and a navigation algorithm. The systems typically provide turn-by-turn navigation by displaying directions on a mobile device or they work as voice guidance provided via a wearable audio system.





Indoor People-Flow Analytics

People flow heatmaps and spaghetti diagrams show movement density and flow, helping to visualize the flow patterns and display analytics of the movements and interactions of the people and things in your physical space. They reveal the dwell-time patterns and highlight waiting times, allowing an increase of operational efficiency through process, space and workflow optimization. Knowing at which location and zone people spent their time can also be used for automatic workhours reconciliation for subcontractors.





Quicker Mustering Time

Even the most up-to-date paper-based mustering processes take a significant amount of time before finally securely discovering who is safe and who is still missing. The complexity of the process multiplies with the size of the facility, the number of floors within buildings and the amount of assembly (=muster) points. Digitalization of the mustering process significantly helps to decrease the time needed to complete it and brings real-time updates of those accounted for and those persons still missing, together with an instant evacuation list.





Faster Rescue Access to Injured Persons and Panic Buttons

In case of emergencies such as fires, explosions or gas leaks, the exact location of affected personnel is known, dramatically reducing the time necessary to rescue them. The location tags are also equipped with a “panic button” with a “man down” feature. In case of a heart attack, incapacitation or injury, the affected person can request help immediately by pressing the panic button, sending an alert with their current position to the control room and speeding up the rescue operation.





Geofencing and Decreasing Restricted Area Movements

SMART HELMET's geofencing feature allows you to set any number of virtual zones, representing geographic boundaries, and enable the automatic triggering of a response when a tracked tag enters or leaves an area. For example, when a person enters a warning zone, the IO link enabled light tower can signalize a possible danger and also alert the facility manager about the violation. If the person continues into the dangerous zone, the machine that represents a risk to the person's health can be automatically stopped, preventing any threat of injury.





Indoor Smart Quarantining Solution to Limit Infection

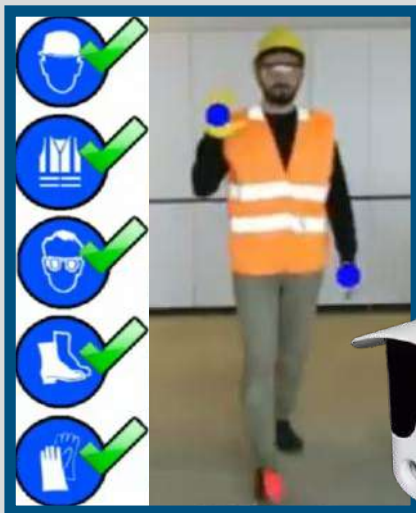
Respiratory infections, such as flu or coronaviruses, including Covid-19, are a serious health risk and their transmission across the workplace is even easier in a closed indoor facility. Using UWB RTLS, companies track team members on their premises to help prevent the spread of infection by monitoring, with one click, anybody who has come into contact with a newly identified infected person. Those exposed staff members are tested and receive the treatment they need as quickly as possible. This “smarter”, faster and selective quarantining helps to save lives and keep mission-critical operations running at all times.





personnel are wearing the required and correct PPE (Personal Protective Equipment). Protechtio RTLS integrated systems can monitor whether a member of staff is not wearing any particular form of PPE.

RECOGNITION SYSTEMS RFID TECHNOLOGY





HSE 4.0 HIGH TECHNOLOGY

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RECOGNITION SYSTEMS

We have also integrated our Real-Time location systems and devices with our personnel & vehicle recognition software.

We are able to visually identify through CCTV systems on site, the persons and vehicles shown.

ARTIFICIAL INTELLIGENCE - AI

SMART HELMET systems which use AI to identify personnel, monitor productivity and analyse risks will be at the forefront of Health & Safety management in dangerous places of work.





SOLUTIONS

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Tag on the forklift



Anchors on the ceiling

Each forklift, AVG or any other manipulation vehicle that needs to be tracked is equipped with a tag that transmits a signal to anchors attached to the ceilings. The anchors then send the signal to the RTLS server and calculate the vehicle's position in real-time and with 30 cm accuracy. The tag can be powered from the vehicle's battery or by its own battery. Please learn more on how UWB RTLS works.



The Benefits of Forklift Tracking

Real-time and Historical Insights into Forklift Operation

By tracking your forklifts, logistics managers are gaining full real-time visibility of the fleet – not only by knowing the exact location of each forklift in real-time, but also by having the ability to track their historical locations with pinpoint accuracy.

The data is then transformed into easy-to-read metrics such as the distance traveled by each forklift, run time versus stop time, the ratio of loaded and unloaded time, the time needed to complete a task, as well as the Overall Equipment Effectiveness (OEE). Given these insights, managers can improve processes and the overall efficiency and utilization of their fleet using the forklift fleet management system.





Increasing Safety by Creating a People-Aware Environment

Certain safety use cases combine people tracking with tracking moving objects, such as tracking forklifts, to prevent injuries. At unloading areas, forklifts are busy with their operations and at any time, anyone, such as the truck driver who just came with new cargo, can suddenly appear in the proximity of the forklift. By tracking both the forklift and the truck driver, the system can automatically alert the forklift operator on their screen that a person (the truck driver) has suddenly entered their operational zone to prevent a fatal injury.





PRODUCTS

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COMING SOON

COMING SOON

COMING SOON

COMING SOON



Active Vehicle Analyzer (GSM&WIFI)



Image Processing System



Portable wearable Wrist Mounted wristband
Barcode scanner armband wear code reader
with finger trigger



Android/iOS wearable UHF Rfid
Reader with bluetooth 4.0

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SMART CAMERA HELMETS

REVOLUTION IN INDUSTRIAL AUGMENTED REALITY



4G  **LTE**



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WE MAKE IT EASY FOR YOU TO DISCOVER THE POWER OF IOT AND INDUSTRY 4.0

1

WE DETERMINE THE
REQUIREMENTS OF YOUR
PROJECT AND DELIVER A
COMPLETE REAL TIME
LOCATION SYSTEM DESIGN

2

WE PROVIDE YOU WITH THE
PRECISE UWB RTLS TAGS AND
ANCHORS THAT ARE IDEAL
FOR YOUR WIRELESS
TRACKING SYSTEM

3

WE PROVIDE EMPOWERING SOFTWARE
THAT GIVES YOU COMPLETE CONTROL
AND OPERATIONAL VISIBILITY

4

WE INSTALL AND
CONFIGURE THE SYSTEM
WITHOUT DISRUPTING
YOUR BUSINESS

5

WE WORK WITH YOU TO
INTEGRATE OUR TRACKING
SYSTEM TO YOUR EXISTING
ERP

6

WE CAN PROVIDE
TRAINING, ONGOING
SYSTEM SUPPORT, AND
EXTENDED WARRANTY



OUR TARGET SECTORS

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CONSTRUCTION



PETROCHEMICALS



LOGISTICS



MINING



HEAVY INDUSTRY



ENERGY



HOSPITAL & HEALTH



MILITARY



PRODUCTION



MILITARY FACILITIES



CEMENT



AVIATION



SHIPYARD



SHIPPING



AIRPORT





THANK
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