

# GOODFYEAR

**PROACTIVE SOLUTIONS** 

# Smart tires for smart freight transport

**Michel Rzonzef** 

Vice President Commercial Tires, Goodyear Europe, Middle East and Africa



## Goodyear: a strong footprint in Europe





Headquarters for Europe, Middle-East and Africa in Brussels

Research and Development for Europe, Middle-East and Africa in Luxembourg

Goodyear
Innovation Center
Luxembourg

+ 1000 employees

+ 40 nationalities

15 factories in Europe

### Introduction











New technologies will reshape freight transport and we believe this is an **Opportunity** 

## Benefits and drivers for road freight industry



#### Reduced costs

- 20 to 25% fuel cost reduction\*
- Optimization of payload using longer vehicles

#### **Increased safety**

- Increased safety thanks to improvement of all monitoring and safety systems
- Improved incidents prediction

#### Benefits to the environment

- Contributing to EU Low Emissions Mobility Strategy
- Meeting regional and urban air quality objectives

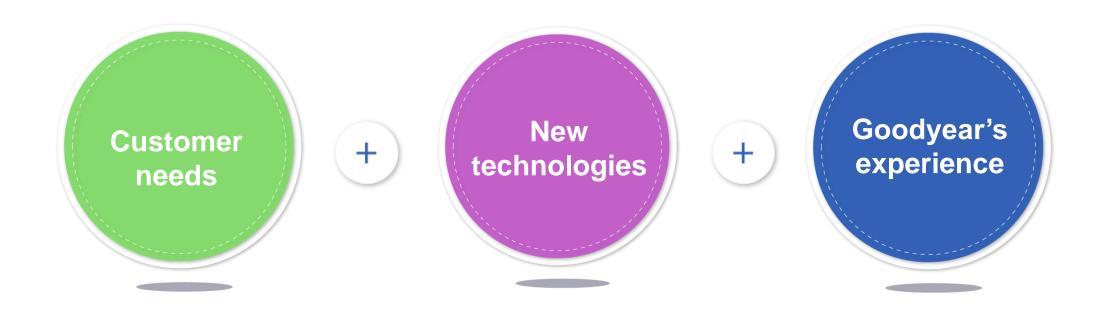
### Higher customer satisfaction and drivers' loyalty

- On-time deliveries
- Safer / 'greener' operations
- Improved reputation
- Driver's role reinforced
- Safer and healthier working environment



# **Goodyear Proactive Solutions is the combination of**







# **Example 1: TPMS Solution** How does it work?









Data transfer every 15 minutes



via mobile network



Goodyear server





Data analysis



Preventive service execution



Alert and user-friendly reporting

# **Example 1: TPMS Solution How does it work?**



# Increased road safety

75% less breakdowns in average\*

# Reduced fuel consumption

476 litres fuel saved per truck per year\*

# Reduced costs

Tires, maintenance, fuel, breakdowns...

# **Improved efficiency**

Improved on-time delivery rate

<sup>\*</sup>Thanks to Goodyear Proactive Solutions predictive alerts and reporting tool. More details available on proactive.goodyear.com

<sup>\*\*</sup>Thanks to constant correct tire pressure. More details available on proactive.goodyear.com

#### From customers' needs to solutions



### **Proactive Tire**



### Tire Pressure Monitoring System (TPMS)

This constantly takes active readings of tire pressures and temperatures in order to reduce breakdowns and optimize uptime and cost of operations

#### **Drive-over-Reader**

This automatically collects tire tread depths and pressures whenever a vehicle accesses or exits a depot to better manage tires and related maintenance

#### **Proactive Fleet**



#### **Driver behavior**

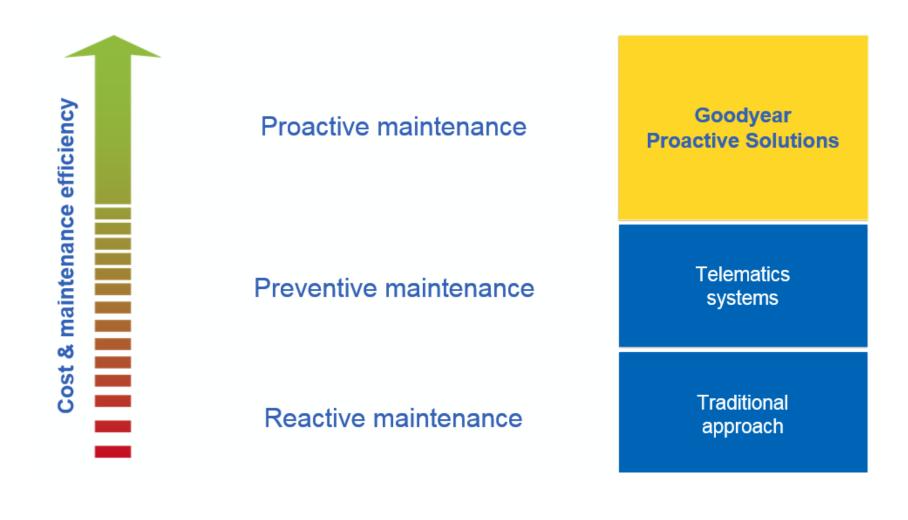
Transmits data on the driver's performance enabling fleets to take active control on driving style in order to improve fuel economy and increase tire life through driver training programs

#### **Track and Trace**

Uses GPS to provide fleets with real time asset location and movement information to improve efficiency and customer services as well as locate stolen vehicles

# From reactive maintenance to proactive maintenance







# Lots of changes are on the way...



### ... but trucks, tires and service will always be needed.

- Freight transport will always need trucks
- Trucks will always need tires
- Tires will always need service
- Tires will become connected





## Mid and long term future of concept tires by Goodyear



# Goodyear IntelliGrip Urban



# Goodyear Eagle 360 Urban Powered by Artificial Intelligence



SENSE DECIDE TRANSFER INTERACT



## Our solutions support the Lean & Green initiative



- Leaner transport chain thanks to predictive maintenance.
- Better utilization of vehicles thanks to more <u>efficient route planning</u>.
- Fuel savings thanks to tire maintenance and driver efficiency improvement resulting in CO2 emission reduction.
- Increased safety thanks to fewer road side incidents and improved driver behavior.

## Our solutions cooperate efficiently with intermodal transport



- Our solutions <u>avoid interruption in the intermodal transport chain</u> thanks to on-time deliveries.
- Our solutions generate <u>data</u> that can be shared and used by the various components of the intermodal chain to improve its <u>efficiency</u>.
- Drive-Over-Reader Solution can provide <u>load information</u>, very sensitive element when using sea or air transport in the chain.

