

**ROUND TABLE EMS  
(Euro Modular System)  
IRF annual congress  
Lisboa May 27th 2010**

**Point of view of Michelin, user of  
European logistics**



# Michelin annual production



194 million tyres from 200g to 4t



19 million maps and guides



# Our European logistics

**6 million tons of products transported/year**

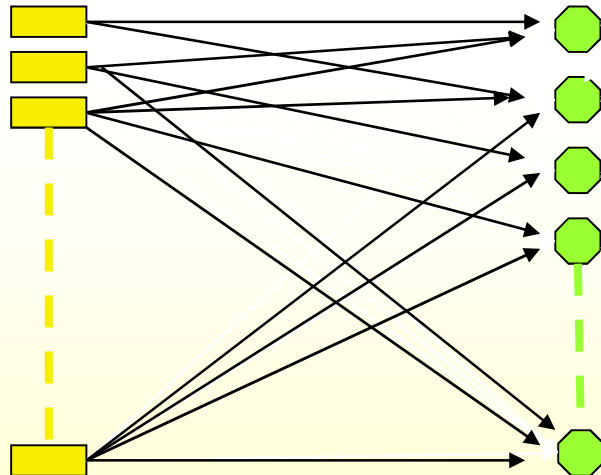
**14,000 different references**



**38 plants**



**31 warehouses**



**60,000 delivery points**

**2,000 trucks/day**

**600 containers/day**

**More than 360 000 trips organised**

**More than 220 M€ freight purchase**

**More than 500 carriers registered**

**More than 1,000 routes**

**Transports are done by trucks, Train, vessels and planes**



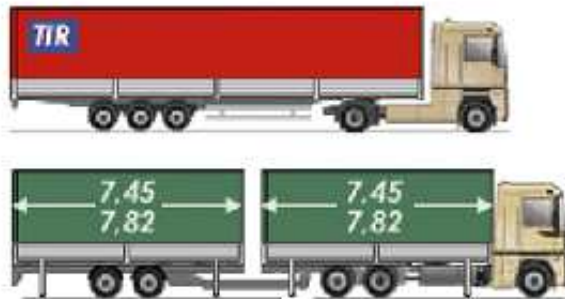
# Why Michelin proactive on EMS issue?

- Michelin endeavours **contributing to sustainable development and mobility** (PRM – CSR commitment)
- Michelin is a **customer of all transport modes**, as
  - an importer of raw materials
  - an exporter of finished products
- Michelin also organizes its **own logistics**
  - on itineraries between some plants
- Actor in the fight against global warming → **tyre RR** plays an important part in fuel consumption of trucks
- Michelin is looking for opportunities of **innovation**
- Necessity to **limit harmful effects of the road** because transport (road transport especially) still responsible of **18% of carbon emissions** (+ pollutants + congestion + problems with road safety etc.)



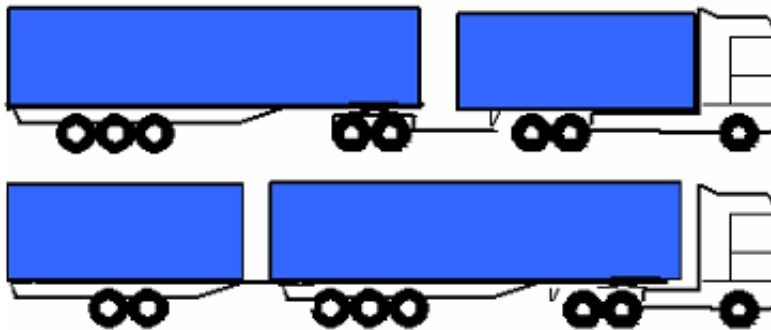
# vehicles description

European Union (Dir 96/53CE), "maxi-code" – 5 axes – 40 t



	articulated	road train
Length	16.50 m	18.75 m
GVW	40 t	40 t
Load capa	27 t	26 t
Volume	98 m <sup>3</sup>	113 m <sup>3</sup>

European Modular System, "EuroCombi" – 8 axes – 60 t



	combinations
Length	25.25 m
GVW	60 t
Load capa	41 t (+50 %)
Volume	155 m <sup>3</sup> (+37%)



# Why EMS seem to be the most sustainable solution for transporting goods?

- Increase of **load or volume** per engine and driver
- **Reduction of truck numbers** : replacement of 3 “maxi-codes” (18,75m) by 2 EMS (25,25m) → less obstruction of the principal road axes
- Decrease in fuel consumption and **CO2 emissions** and pollutants : **-15% / ton or m<sup>3</sup>** (Michelin carbon footprint study, December 2009)
- Loads per axle reduced and more uniform and therefore **less pavement damage**
- Ease of the shortage of qualified drivers

→ **Total compatibility with the co-modality concept**



# EU state of play of authorisation or pilots for EMS

- **Used since the 60s in Sweden and Finland** → effectiveness profits recognized
- Since 2003, a pilot was led successfully in the NL with different reports (last one on safety published in April 2010) → **authorisation effective now**
- Other studies began in some **German Lander, in Denmark and in Belgium** (Flanders region – April 2010)
- The **German** coalition announced they are studying any possibility for developing “*new sustainable ways of road transports*” → **EMS pilot starting in January 2011**



# What is Michelin asking for ?

- The main modes of transport have their **own customers**, according to criteria of freight **nature**, of **volume**, of **value**  
→ **road, railways, water are complementary** and society's interest is to let modes progressing
- **The concept of co-modality should stay at a top priority.** All modes of transports should be treated as equal and should be optimized
- Michelin is in favour of **launching new pilots** for optimizing the benefits of transeuropean pilots. Specific support for pilots in **France, Germany and Spain**





Thank you for your attention

