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
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 axles – 40 t

<table>
<thead>
<tr>
<th></th>
<th>articulated</th>
<th>road train</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>16.50 m</td>
<td>18.75 m</td>
</tr>
<tr>
<td>GVW</td>
<td>40 t</td>
<td>40 t</td>
</tr>
<tr>
<td>Load capa</td>
<td>27 t</td>
<td>26 t</td>
</tr>
<tr>
<td>Volume</td>
<td>98 m³</td>
<td>113 m³</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>combinations</th>
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<tbody>
<tr>
<td>Length</td>
<td>25.25 m</td>
</tr>
<tr>
<td>GVW</td>
<td>60 t</td>
</tr>
<tr>
<td>Load capa</td>
<td>41 t (+50 %)</td>
</tr>
<tr>
<td>Volume</td>
<td>155 m³ (+37 %)</td>
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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 m³ (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