Environmental Management and Analysis: French motorways’ Green Package
Overview of sanef groupe

- **sanef** and **sapn** have a stable, financially-sound shareholder structure led by **abertis**, industrial reference shareholder

- Turnover 2009 = m€ 1 414

- Network of 1 743 km

- **sanef groupe** has 4 activities
  - Concessions’ operation and management
  - Concessions’ development
  - ETC toll system development and operation
  - Commercialization of interoperable toll products for Cars & Trucks
m€ 250 for better motorways

- Within the French Economy Stimulus Plan and following the “Grenelle Environnement”, sanef groupe decided to propose a “green package”
  - m€ 250 to be invested in 3 years
    - Investments non contractually required
  - Better integration of the infrastructure on 5 main themes
    - Air protection and CO2 reduction
    - Protection of water resources
    - Noise protection
    - Biodiversity protection
    - Eco-design of the infrastructure
  - Investments compensated by a 1-year extension of sanef and sapn concession contracts

- Opportunity to offer more services to customers
  - non-stop electronic tolling, new type of rest areas, etc.
Air protection – Non-stop ETC lanes

- **Reducing CO2 emissions**
- Dedicated ETC 30km/h lane
- New service touted by many customers
- Many advantages
  - Improves safely traffic flows at toll plazas
  - More comfort and higher service level
  - Significant fuel savings, especially for HGVs, with the suppression of stops and restarts
Air protection – Carpooling and co-modality

- **Reducing CO2 emissions**

- **Developing carpooling**
  - Construction of new parking facility with 80 places, used as a meeting point for carpooling to the city of Compiègne or to major transportation hubs (Roissy airport, TGV Haute Picardie station etc.)
  - Feasibility studies for additional carpooling parkings in partnership with local authorities

- **Promoting co-modality**
  - Construction of a HGV parking with 150 places on the A1, with a service center for HGV drivers
  - Site close to large warehouses and logistics services and in the vicinity of the future inland waterway port on the Oise river, on the Canal Seine Nord Europe corridor
Improving traffic flow and safety on the North European Corridor

Implementation of new traffic management

- Tools adapted to this area with dense traffic
- Travel time estimates as accurate as possible
- Immediate incident detection on the most circulated sections
- Dynamically alert with automatic lane closures without endangering operational staff
- Temporarily prohibit of overtaking by heavy vehicles
- Corridor management: rerouting of traffic in case of a motorway closure, ensuring partial continuity with the interconnected motorway network in northern France (A1, A16, A29, A26)
• **Protecting the water resources along the motorways**

• Water protection derived Water Act (1992) already implemented on more recent motorways

• **Commitment to go further and upgrade older motorway sections**
  – 16 wastewater facilities to be upgraded
  – 8 additional drying beds for in situ treatment of sludge;
  – Additional 192,000 m³ of additional storage capacity to better regulate run-off waterflows
Noise Protection

- **Better protecting housings located in existing “noise blackspots” and anticipate future obligations**

- Commitment to treat all existing “noise blackspots”

- Anticipation and treatment for areas that could potentially become “noise blackspots” in the coming 20 years
  - 18 action plans for noise exposure reduction
  - 4 new site with noise barriers
  - 1 site to be upgraded
  - Building insulations directly into homes
  - 550 “noise blackspots” to be treated

www.irf2010.com
**Preserving the biodiversity along the motorway**

- Because of little human influence, green areas along motorways are paradoxically rich in biodiversity
- Some innovative projects for the fauna and flora
  - Census/systematic identification of species along the network and identification of best practices for preservation and development
  - Preliminary studies for the construction of an additional Wildlife Passage near Saverne
  - Contribution to the protection of “Grand Hamster d’Alsace”, an endangered specie
  - Replacement of older trees (mostly poplar and acacia woodlands), by native species. Nearly 10 000 trees should be planted
Eco-design of the infrastructure

- **Integrating “green” best practices and innovations from the start**

- **Design and build eco-friendly buildings**
  - Use environmentally-friendly materials
  - Low energy consumption label (heating, cooling, ventilation, hot water, auxiliary heating, lighting);
  - Renewable energies (wind or solar) with the aim of a positive energy balance

- **2 particular sites:**
  - New “Eco-center” for the O&M of the A4 Reims Southern Bypass
  - New design for rest areas: wastewater treatment by reed filters, platform run-off water treatment, collecting and sorting of waste, energetic optimizing of the equipment, etc…
Advantages of Green Package

• Upgrade of older motorways to new environmental standards
• Improved customer services and foster innovation
• Economic benefit to most French regions given the geographical spread of the motorway networks
• Quick implementation (financing readily available, quick decision making by concessionaires)

• The Green Package is a good example of the partnership between the French State and the toll road concessionaire
  – No impact on the French State budget (and deficit)
  – Extension by one year of the concession contracts
Thank you for your time

Arnaud HARY
sanef
Head of Concessions Development Division
30 boulevard Gallieni
92130 ISSY LES MOULINEAUX
FRANCE
arnaud.hary@sanef.com
T +33 1 41 90 59 59
M +33 6 30 07 94 15