1. Restaurants
2. Mobility and Transport
   a. GS-IS strategy
   b. New signage for regular shuttles
   c. Mobility study in collaboration with Athens Universities
   d. Mobility concept test with HERTZ
   e. Natural gas vehicles
3. CERN Hotel
   a. Program of works
   b. Statistics
   c. Ongoing improvements
4. Miscellaneous
Restaurant Nr 1

Extension of Restaurant Nr 1:
1. The new extension of the restaurant has been opened to customers on 6th December.
2. Two rooms of the restaurant have been closed for renovation work on 6th December for two months.
Restaurant Nr 2

Extension of Restaurant Nr 2:
1. Main works finished 3rd week of September;
2. Installation of furniture: end of September;
3. Restaurant opened to customers at the beginning of October.

Main works:
1. Asbestos removal in the floor;
2. New concrete screed;
3. Special resin floor.
Mobility and Transport
GS-IS / mobility strategy – on going actions

1. Regular shuttles
2. Additional shuttle and driver for visitors transportation
3. Increase of the bicycle fleet with the introduction of electric bicycles? Motorcycles? in collaboration with PH (Pilot project next year)
4. Taking into account first results of the global mobility study undertaken by Athens universities
5. Optimization of CERN car fleet (currently nearly 1 000 vehicles of which more than 800 vehicles under peugeot contract)
   a. Car-Sharing Pilot Project with HERTZ (started on 1st July) in collaboration with PH Department acting as project leader;
   b. Optimisation of the fleet based on Department’s input and environmental approach. Introduction of bi-fuel engines (Pending FC approval) and electric cars (under negotiation);
   c. Additional cars (leasing from 15 to 18 months) will be supplied during LHC shutdown.

Since the 1st of February, nearly 40’000 people were transported

December ACCU Meeting – I. Mardirossian/V. Marchal
New signage for regular shuttles

Brand-new signage for the CERN shuttles

with the collaboration of DGS-CO new panels have been designed with clear information about routes and timetables and have now been placed in the Main Building and at each shuttle stop.

Complete relooking of GS website showing all the timetables and routes

http://gs-dep.web.cern.ch/gs-dep/groups/SEM/ls/ShuttleService/
Mobility study in collaboration with Athens Universities

1. **Scope:**

   ✓ record and analyze existing transportation conditions and needs of CERN community;
   ✓ highlight innovative solutions;
   ✓ establish a sustainable transportation system for the CERN community.

2. **Progress report:**

   ✓ understanding and codifying CERN vision: interviews with Directors, Heads of Departments, space managers, car fleet coordinators;
   ✓ Processing of collected data
   ✓ 1st Deliverable done:
     - Analysis of CERN Vision and Priorities
     - Transportation Network Simulation Model (2nd Volume)
     - Preliminary Findings from the Pilot Survey (3rd Volume)

Results and Proposals

- Task 1: Understanding CERN vision for transportation (INSTAL)
- Task 2: Collecting transportation data and information (INSTAL and NTUA)
  - Sub-task 2.1: Collect trip characteristics and habits (INSTAL)
  - Sub-task 2.2: Collect traveler satisfaction information (INSTAL)
  - Sub-task 2.3: Collect information on parking, signs and pedestrians (INSTAL & NTUA)
- Task 3: Develop Preference Models (INSTAL)
- Task 4: Macroscopic simulation of the CERN transportation network (NTUA)
  - Sub-task 4.1: Network Codification
  - Sub-task 4.2: Measurements
  - Sub-task 4.3: Model Development and Calibration
  - Sub-task 4.4: Scenario Development
- Task 5: Future Paths (NTUA and INSTAL)

DONE

RESULTS AND PROPOSALS
Existing transport mode alternatives at CERN
- from France to CERN: private car, bus, bicycle, walk;
- from Switzerland to CERN: bus (Tram in the near future) private car, taxi, bicycle and walk;
- within CERN: shuttle buses, CERN fleet cars, Car sharing, CERN bicycles, private car, and walking

Important to address the needs of staff and users, with different characteristics and requirements for mobility

Transport Policy Determination Methodology

- Walking and cycling promotion;
- Improvement of public transportation systems
- Limitation and rationalization of private vehicle usage
- Efforts towards reducing noise and gas emissions;
- Implementation of intelligent and accessible transport

- Athens master plan (1997, 2009)
- the Tel-Aviv master plan (1999)
Mobility study

Vision

• Acceptable level of mobility to all members of the community, ensuring community coherence and improved working / living standards as well as overall well-being;
• Improve passenger travel safety by reducing transport-related accidents, injuries, and fatalities;
• Equity in mobility and accessibility to all
• Public transport should become the preferred mode
• Improving environmental conditions in the campus

Transport Policy

• Mobility Improvement
• Improvement of Physical Environment
• Support Trip Security and Safety

Possible strategic measures

a. Optimize usage of current fleet;
b. Optimize parking usage;
c. Optimize the shuttle bus service frequency, where appropriate, in order to increase level-of-service;
d. Provide traffic information
e. Use of hybrid/electric vehicles, where appropriate, in order to limit emissions and improve the environmental conditions
Progress report
✓ 270 RFID cards have been distributed;
✓ An increasing interest
✓ Positive feedback from the users.

CERN STATISTICS 2010

TEST WITH 19 HERTZ CARS (equipped with carshare technology)

Period: July to November 2010

<table>
<thead>
<tr>
<th></th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANSACTIONS</td>
<td>217</td>
<td>295</td>
<td>401</td>
<td>324</td>
<td>336</td>
<td>1,573</td>
</tr>
<tr>
<td>Avg. per day</td>
<td>11.4</td>
<td>13.4</td>
<td>18.2</td>
<td>15.4</td>
<td>15.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Avg. duration per transaction</td>
<td>02:01:04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg. Km per transaction</td>
<td>4,7Km</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of total members</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prolongation of the Pilot project until March 2011

As from March 2011, launch of CERN car sharing, opened to the entire CERN community with CERN own cars (reflections on the possible use of a mix of electric cars and standard cars)
Why driving natural gas cars?

- **Help save the environment** without conflicts with food and agriculture ➔ « think globally by acting locally »
- Cheaper **FUEL**
- **Mature technology**: Mass production vehicles and existing pumping stations
- The **security** of vehicles is controlled by a recognised authority
- **Positive image and outlook**
- No usage restrictions (Like GPL for example)

---

### Chart

<table>
<thead>
<tr>
<th>Gas Type</th>
<th>CO₂ Emissions</th>
<th>Methane Emissions</th>
<th>NMHC Emissions</th>
<th>NOₓ Emissions</th>
<th>Particulate Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>120 g/km</td>
<td>153 g/km</td>
<td>0.014 g/km</td>
<td>0.020 g/km</td>
<td>216 mln partic./km</td>
</tr>
<tr>
<td>Diesel (DPF)</td>
<td>135 g/km</td>
<td>0.014 g/km</td>
<td>0.036 g/km</td>
<td>0.042 g/km</td>
<td>601 mln partic./km</td>
</tr>
<tr>
<td>Essence</td>
<td>153 g/km</td>
<td>0.014 g/km</td>
<td>0.036 g/km</td>
<td>0.042 g/km</td>
<td>601 mln partic./km</td>
</tr>
</tbody>
</table>

- **Source et autres mesures:** étude Empa 2007 «Comparaison des émissions de différents modes de propulsion». 
B. 38
1. Replacement of the kitchen, furniture (end of work January 2011);
2. Renovation of 15 showers (end of work mid December 2010);
3. Curtains changed in the lounges (Done);
4. TV and international channels to be installed in the 4 lounges (Done);
5. Creation of 2 additional hotel rooms (Jan. 2011).

B. 39
1. Replacement of the kitchen, furniture (end of work early Feb. 2011) and extension of dining room (Dec. 2010);
2. Self-service computers in the lounge (Done);
3. Change of all bedside lamps (Done);
4. TV and international channels to be installed in the 4 lounges (Done);
5. Renovation of 116 showers (end of work December 2010);
6. Replacement of furniture at the reception and the lounges + reception painting (Done);
7. Curtains changed in all rooms and lounges (done);
8. Hotel reception written on the front of the building (Done).

B. 41
1. New individual lockers installed for clothes, suitcases and luggage (Done);
2. Luggage tables in all rooms (in progress, December 2010).
CERN Hotel
2011-2012 estimated program of work

B. 38

1. Centralization of fire detectors (January 2011);*
2. Replacement of the wall to wall carpet of the corridors and the lounges;
3. Card security system replacing locks and keys;
4. Intervention on air extraction units;
5. All taps will be changed;
6. Replacement of old furniture in the rooms:
   ▪ All the rooms: office chairs, bedside lamps, telephones
   ▪ 3rd, 4th and 5th floors: bedding.

B. 39

1. Change of all taps in the bathrooms;
2. Replacement of the wall to wall carpet of the corridors and the lounges;
3. Renovation of the rooms: replacement of old furniture (chairs, bedding, office lamps, telephone);
4. Creation of additional hotel rooms (ex- offices);

B. 41

1. Installation of solar panels

* Building 38 will be closed during renovation in January 2011
CERN Hotel - occupancy rates (excluding St Genis Foyer)

CERN Hotel - occupancy rates (5 days) 2009 and 2010

- Months: Jan, Feb, Mar, Apr, May, June, July, Aug, Sept, Oct, Nov, Dec
- Occupancy rates:
  - 0.0 to 100.0

- 2009: Orange bars
- 2010: Green bars
CERN Hotel - Occupancy rates (excluding St Genis Foyer)

CERN Hotel - Occupancy rate (7 days) 2009 and 2010

<table>
<thead>
<tr>
<th>Months</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Feb</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Mar</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>Apr</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>May</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>June</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Sept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>Nov</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Dec</td>
<td>90%</td>
<td>100%</td>
</tr>
</tbody>
</table>

2008 annual occupancy rate: 72.5%
(source Betisoft)

2009 annual occupancy rate: 73.5%
(source Fidelio as from July 2009)

2010 occupancy rate Jan-Nov: 79.2%
(source Fidelio)

For information 2009 Jan-Nov: 73.8%
## CERN Hotel - Refusals

<table>
<thead>
<tr>
<th>Month</th>
<th>No show</th>
<th>Cancellations</th>
<th>Refusals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>424</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>525</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>38</td>
<td>449</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
<td>866 (Vulcan)</td>
<td>144</td>
</tr>
<tr>
<td>5</td>
<td>17</td>
<td>433</td>
<td>67</td>
</tr>
<tr>
<td>6</td>
<td>27</td>
<td>1107</td>
<td>44</td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>702</td>
<td>37</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
<td>558</td>
<td>49</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>1048</td>
<td>31</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
<td>1288</td>
<td>26</td>
</tr>
<tr>
<td>11</td>
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<td>1054</td>
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</tr>
<tr>
<td>12</td>
<td>5</td>
<td>525</td>
<td>429</td>
</tr>
<tr>
<td>Total</td>
<td>264</td>
<td>8454</td>
<td></td>
</tr>
</tbody>
</table>
### CERN Hotel - Modifications

**CERN Hotel 2010 – Modification of reservations as from April 2010**

<table>
<thead>
<tr>
<th>Month</th>
<th>Desk</th>
<th>Phone</th>
<th>Email</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>4</td>
<td>80</td>
<td>98</td>
<td>331</td>
<td>509</td>
</tr>
<tr>
<td>5</td>
<td>53</td>
<td>133</td>
<td>401</td>
<td>587</td>
</tr>
<tr>
<td>6</td>
<td>104</td>
<td>128</td>
<td>391</td>
<td>623</td>
</tr>
<tr>
<td>7</td>
<td>139</td>
<td>146</td>
<td>137</td>
<td>422</td>
</tr>
<tr>
<td>8</td>
<td>108</td>
<td>118</td>
<td>125</td>
<td>351</td>
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<td>9</td>
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<td>93</td>
<td>257</td>
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<td>10</td>
<td>128</td>
<td>53</td>
<td>325</td>
<td>506</td>
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<tr>
<td>11</td>
<td>132</td>
<td>141</td>
<td>131</td>
<td>404</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>828</strong></td>
<td><strong>897</strong></td>
<td><strong>1934</strong></td>
<td><strong>3659</strong></td>
</tr>
</tbody>
</table>
CERN Hotel – on going improvements

Web-booking enhancements

1. Possibility to book all the rooms via WWW booking:
   - Handicapped rooms [done],
   - shared room [done],
   - St-Genis foyer [done].

2. Proposal for new dates in case no availability for requested and type of room requested [done];

3. Possibility to book a room for the 6 following months [done]

4. Long Term waiting list [mid December 2010];

5. Possibility to modify a WWW reservation [mid December 2010]

Continue to promote deals with external hostels

Other enhancements

1. Develop the collaboration with the “Foyer de Saint-Genis”, review the level of service:
   - Cleaning weekend included [done];
   - Keys management in collaboration with CERN reception [done];
   - Smartening-up of the Foyer (kitchens, lounges, rooms, etc) [in process];
   - Regular quality audits.

2. On going discussion with Meyrin to accommodate more summer students (fall-out shelters)
### CERN Hotel - some figures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Fax</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td>42</td>
<td>28</td>
<td>0</td>
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<tr>
<td>Email</td>
<td>8 218</td>
<td>8 512</td>
<td>11 880</td>
<td>10 933</td>
<td>8091</td>
<td>6236</td>
<td>5969</td>
</tr>
</tbody>
</table>

*From D to D+60*

*From D to D+120*

*×5*
1. Cleaning of the facades of building 40
2. Exhibition to enhance awareness for waste recycling took place in November in the Main Building together with an informative campaign

3. Removal and elimination of dangerous waste:
   - Bottles of gas, Beryllium, Caesium, lithium reactors (B. 262);
   - Elimination and recycling of 440 t. of condensers and soiled transformers by the PCB (stockage area 931)
Other services

• **Campaign for the felling of poplars** for safety reasons
• Replantation of cherry trees:
  – start in December 2010
  – Will continue first quarter 2011
Many thanks for your attention

Q&A and Discussion