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Summary of the TAPESTRY Project, Focusing on Three Key Campaigns

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Workshop 2e: Key factors in achieving sustainable change in attitudes and behaviour change

Introduction

When implemented in isolation, transport infrastructure projects often fail to bring about significant behavioural change. As a result the reliance on the use of the private car that has developed over the past 30-40 years is proving difficult to change purely through the provision of alternative transport options. The TAPESTRY hypothesis is that changes to embedded behaviour do not occur unless accompanied / preceded by a change of attitude.

TAPESTRY is a three year EC 5th Framework project part funded by DGTREN. Its main objective is to investigate how changes in behaviour in favour of healthier and more sustainable transport options can be influenced by communication programmes or campaigns. TAPESTRY includes 15 case studies split into three broad topic areas:

INTERMODAL Case Studies – Promoting Alternatives to the Car

These six campaigns focus on reducing car use through the promotion of alternative forms of transport, such as public transport, walking and cycling, in order to encourage modal shift. The campaigns are being developed in schools, urban households and city centre shopping areas.

MODE REPOSITIONING Case Studies – Promoting the Image of Public Transport

These five campaigns aim to promote or change the image of public transport, with a view to encouraging greater use. Examples include marketing campaigns linked to car free days, community involvement programmes and the promotion of new services to tourists.

HEALTH & ENVIRONMENT Case Studies – Promoting Benefits of Transport Choices on Personal Health and the Environment

These four campaigns focus on different messages related to the health benefits of walking and cycling or to the positive impacts of reducing car use on air quality and the environment.

The Case Studies

The case study campaigns are each individually targeted at different journey types and / or target sub-groups of the overall population (e.g. schoolchildren, parents and teachers addressing journeys to and from school; members of rural communities for all local journeys; visitors to specific cultural or tourist destinations). Each of the TAPESTRY case study campaigns developed, monitored and is now evaluating the use of travel awareness, communication, education and publicity measures in terms of their impacts on the knowledge, attitudes and behaviour of its own target group. The first part of this paper focuses on the activities and initial outputs from three key campaigns within the project which provide both good examples of how the TAPESTRY campaigns have been designed and implemented and show the links between the campaigns which will enable the transfer of experiences between sites. The second part then establishes the research basis for TAPESTRY, in particular a review of International Best Practice and the common assessment framework developed as part of the project.

Example Campaign 1: Travel Awareness in Belgian Schools (Mol & Geel)

This case study, which has been led by Langzaam Verkeer, comprised two campaigns located in the towns of Geel and Mol. Although both campaigns were centred on producing school travel plans, the individual campaigns had a slightly different focus to each other. The city of Geel aimed to optimise usage of bicycle networks and existing public transport, whereas Mol aimed to work closely with a local mobility centre in the production of its school travel plan.

The campaign objectives were set in the context of the Flanders Mobility Covenant Program. This is an instrument for sustainable local policy planning formed in partnerships between the Flemish government, local authorities, the Flemish PT-company and (in the best cases) mobility users. Integrated planning between these organisations produced a mobility plan containing a package of 18 project opportunities including supporting measures, such as campaigns and green travel plans.

The stated objectives were:

- ? to increase awareness and acceptance in schools of their role / participation in stimulating sustainable travel between home and school, leading to schools becoming partners in local mobility planning;
- ? to increase awareness of the dangers on the road and the negative impacts of cars on the environment;
- ? to increase the proportion of schoolchildren who walk, cycle or catch public transport to school safely with a view to continuing this behaviour into later life.

Both towns have an excellent reputation as centres for education and this leads to significant demand from people travelling to schools in Mol and Geel from surrounding areas. Hence the campaigns in both towns focused heavily on increasing road safety awareness and ensuring that children who are old enough to travel alone to school fully understand the implications of increased car use and are familiar with the available alternatives. Originally the plan was to involve two schools in Geel and two in Mol, but the demand became so great that the campaigns were expanded to include ten schools in Geel and two in Mol. Even this expansion was not sufficient to satisfy the demand as 13 schools in Geel and 12 in Mol had signed the declaration that they were prepared to participate for some parts of the campaign.

Campaign Measures

- ? 1) Under the policy guidelines of the Flemish Government, schools that are located within 200 metres of a regional road have to ensure that the road environment and multi-modal travel patterns meet given criteria. The schools that fall within this caveat are encouraged to produce a school travel plan. The participating schools have worked with Langzaam Verkeer and the local authority and translated their new plans into a format that is understandable by children within the classroom and have developed appropriate material for use in lessons.
- ? 2) Both municipalities have identified a 'traffic-educating route' (a signposted route for pedestrians and cyclists that engages pupils and parents in situations instructive for the purpose of traffic education). The aim is to ensure that children are independent enough to safely walk or cycle alone along a well known route.
- ? 3) In both towns these actions have been supported through demonstration sessions for teachers on how to work with the new materials and the new educational goals.

- ? 4) In the final week of September 2002 a “TAPESTRY project week” was run which involved a focus on mobility related issues with visits from external speakers and project work amongst other actions.

Campaign Assessment

As for all the TAPESTRY campaigns, assessment has formed an important part of the Geel & Mol campaigns with a view to understanding the impact of the package of activities on the schoolchildren. A standard questionnaire was used in the participating schools prior to the campaigns and then soon after the TAPESTRY project week. Initial results are now available which indicate that there has been a statistically significant change in behaviour and attitude which is largely due to the TAPESTRY campaigns.

The analysis suggests that awareness of the problems caused by high numbers of cars at the school gates and the need for children to take responsibility in encouraging their parents to use the car less for trips to school were high prior to the campaigns, with approximately 65% of the sample agreeing with the questions they were asked about these issues. There was no significant change in agreement over the course of the campaigns. However, the campaigns have had an impact on how the various modes are perceived by the children: the proportion of pupils rating the car above cycling because of its cool character, easiness door-to-door travel and as an enjoyable way to travel has decreased significantly in the after survey! Unfortunately an opposite change is observed in terms of perception of comfort, although the importance of comfort as a deciding factor for choice of mode fell significantly over the course of the campaigns.

Given the stated objectives of the campaign, perhaps the most important and relevant result is the observed change in behaviour, which shows a statistically significant increase in the proportion of children cycling to school (40.6% ? 50.5%) and a corresponding decrease in those travelling by car (47.8% ? 37.3%).

Campaign recall and tests on the accuracy of this recall are positive with ratings between 60 and 100%, with variations according to school group etc. Given that there were no influencing factors recorded for this group external to the structured TAPESTRY campaigns these initial results indicate a very successful campaign.

Example Campaign 2: Understanding the Importance of Public Transport in Rome

The city of Rome is particularly aware of the problem traffic congestion outside schools with kids jumping out of cars and having to weave their way through parked cars to reach the school gate and is keen to address it. Therefore, with the support of the municipality ATAC SpA, the company that plans and monitors public mobility in Rome, created a structured plan to stimulate and educate young people to a major use of public transport.

The aim of the case study in Rome is to reduce the use of private vehicles by modifying personal travel behaviour, resulting in an increase in the use of public transport modes.

The campaign objectives, set by ATAC’s Marketing and Communication Department, were:

- ? to examine how to influence the attitudes of a target group in the way they view traffic and pollution problems as well as vandalism.
- ? to reduce vandalism
- ? to reduce ticketless travel / fare evasion
- ? to increase respect for passengers on public transport
- ? to enhance the perception of public transport staff

- ? to modify future behaviour towards reducing the use of private vehicles in favour of public transport
- ? to draw attention to the environmental impacts of transport use.

Campaign Measures

The method chosen by ATAC to deal with the problem in Rome was the implementation of an awareness campaign addressing a sample of 1200 pupils representing 30 of the city's schools from right across the city.

The project comprised 3 main phases:

- ? the "ex-ante" phase; involving the analysis of the target group's mobility habits before the TAPESTRY campaign
- ? the campaign itself
- ? the " ex-post" phase ; which evaluates the impact of the TAPESTRY campaign on the children's mobility behaviour and their perception of the pollution and traffic problems.

The campaign message addresses the understanding of the traffic problem and encourages the pupils exposed to switch their mobility habits from using private cars to the use of public transport network. The message is also indirectly addressing the pupil's parents.

The tools used during the campaign included:

- ? the questionnaire, which as well as providing information for the before and after assessments was also designed in partnership with child psychologists to make the children think about their actions and the consequences
- ? a visit to ATAC depots
- ? gifts such as a specially designed cycle helmet, a TAPESTRY T-shirt and a package containing ATAC information material (maps, leaflets etc.)
- ? an interactive game (TRAMMY), which was made available on CD-ROM
- ? ATAC organised an exhibition at the end of the campaign of the best drawings by the participating children, representing the theme: "Why prefer public transport?"
- ? the campaign was closed with a party that raised a lot of interest among the children.

Campaign Assessment

The TAPESTRY survey questionnaires were based on the core questions in the TAPESTRY Common Assessment Framework (CAF) and cover the following issues:

- ? Attitudes towards public transport
- ? Attitudes towards public transport facilities currently available to use
- ? Reasons for travel and the need to travel
- ? Level of awareness of transport & environmental issues
- ? Need for information on travel, transport and facilities
- ? Willingness / ability to change (by target groups)

As for several of the TAPESTRY campaigns, it was necessary to modify this questionnaire into a simpler format because it was to be completed by children. Hence the format actually followed a simplified "children's CAF".

In total 1200 questionnaires were distributed in both the before and after assessment periods. In order to achieve direct comparability the analysis was restricted to completed questionnaires from a school class that was sent the questionnaire both before and after the campaign. (Due to administrative problems distributing the questionnaires some classes only

received the before questionnaire and some classes only received the after questionnaire.) As a result the analysis is based on around 670 questionnaires.

The analysis of this campaign is in its early stages. However it is already known that after the campaign, the proportion of pupils who consider public transport as "boring" dropped by 20% from 85% to 68% and 58% of them said that they would use public transport if they could travel together with their friends. Indeed, after the first month of the campaign, pupils were already changing their habits, with 5% of them transferring to walking and 2% to using the bus, for the journey to and from school.

The pupils also acknowledge that there are safe and cheap ways to avoid traffic problems and to reduce pollution: pupils have accepted as solutions to these problems walking (93%), to reduce the use of the car (89%) and the use of public transport (84%).

Example Campaign 3: Reducing Vandalism to Improve the Image of the Bus (Dublin)

This case study has investigated approaches that will improve the environment for passengers on bus services in Dublin. Some services in Dublin were identified as suffering from poor passenger behaviour, along with drinking, eating, smoking and vandalism which were shown to be affecting patronage levels – *see parallel paper on benchmarking for evidence of this*. The TAPESTRY campaign was based on the premise that improvement of the on-bus environment would lead to better quality of travel, without fear, leading to an increase in bus usage.

The following objectives were set by the case study management group - Dublin Bus, Adshell, Garda, ISS in association with Interactions Ltd.

- ? to reposition the bus/service in the minds of children so that they respect it, leading to:
 - o reduced damage levels
 - o perception of safer environment
 - o greater use by off-peak travellers
- ? to reposition the bus/service in the minds of bus users and potential users so that they:
 - o will feel safer
 - o perceive the bus as a safe pleasant mode of travel
 - o use the bus as much as their travel wishes dictate and not be inhibited.

Campaign Measures

The campaign was focused on a bus route to the Northwest of Dublin that had received an infrastructure upgrade to Quality Bus Corridors status, but which had not shown the expected increase in route performance. A similar route was used as a control. The objectives show that the campaign has two different target groups. The major campaigning activities were aimed at the schoolchildren and their parents through the use of a competition in four local schools where the children were asked to design a picture on the subject 'How the bus is useful to me'. This was done with the intention of making the children value and respect the bus as an important element of their daily lives without it being an obvious series of alienating lectures. The winning entries were then used to develop material for display along the route. One of the entries delivered the slogan 'The Dublin Bus is here for us' and was displayed on the sides of 14 buses for 2 weeks in September 2002. Another winning entry was used as a poster and was displayed in a number of bus shelters along the route along with information about what Dublin Bus was hoping to achieve. 14 more entries were used in the Dublin Bus corporate calendar for 2003 which was distributed to 5000 households in the area.

The residents of the area were exposed to the same campaign as they travelled on bus. The aim was that the effect on would be an improved perception of the role of the bus as well as a

perceived improvement in safety, cleanliness and comfort as a consequence of the effects of the campaign on the local children.

Campaign Assessment

These two target groups were treated separately. The schoolchildren were not surveyed using the formal TAPESTRY questionnaire. Instead their attitudes were examined in focus group discussions. Results from this survey have provided valuable insight into the attitudes of and acceptance of vandals in the community. This information was used in designing the competition for schoolchildren and the resulting campaign.

The second target audience – the residents who are the travelling public were subjected to a detailed questionnaire based on the TAPESTRY assessment methodology with some additional locally driven questions. Again, interpretation of the results is in its early stages, but headline results include:

- ? 34% recall of the calendar and 46% of these respondents feeling that it improved their opinion of Dublin Bus
- ? 10% said they had started to use route 27 more in recent months
- ? Daytime usage of at least twice a week up from 22% before the campaign to 48% after
- ? Avoidance of the bus has decreased
- ? Feelings of safety on the bus have increased

Research Basis

The campaigns have been designed using knowledge gained from a review of International Best Practice covering a broad spectrum of campaigns related to travel, health and environment awareness, key lessons and recommendations from previous and ongoing EU and non-EU research projects into travel awareness, a brief review of transport policies across EU member states and an assessment of current theories of behavioural change and how these relate to travellers' attitudes and behaviour.

The conclusions of the review were targeted at helping the partners involved in the design and implementation of the TAPESTRY case studies to understand:

- ? the basic theory of behavioural change,
- ? the relationship between the basic theory of behavioural change and travel behaviour (especially in the context of how it relates to the process of changing travel behaviour),
- ? the importance of communication strategies and the different types of campaigns,
- ? the important elements in designing and implementing the right campaign,
- ? the importance of monitoring and evaluating their campaigns, and
- ? the need for integration of programmes and campaigns at different levels.

One of the key messages identified by the best practice review was that monitoring and assessment needs to be built into the project design from its inception and to be carried out to the highest possible scientific standards. In the majority of campaigns reviewed, monitoring and assessment activities were missing, or at best inadequate. The particular benefits of a comprehensive monitoring and assessment campaign have been identified as:

- ? Setting a baseline through assessment of initial behaviour / awareness / acceptance
- ? Identification of target groups
- ? Setting objectives and related targets
- ? Monitoring interim progress (with respect to the effectiveness of specific media or messages)
- ? Measuring changes in behaviour / awareness / acceptance
- ? Assessing level of involvement of key actors

- ? Identifying contextual / external influencing factors
- ? Measuring success vs. the objectives
- ? Assessing campaign cost effectiveness
- ? Identifying future opportunities (new target groups) or dangers (campaign over exposure)
- ? Helping with transferability

In order to achieve these benefits the basic process for the development and application of an assessment programme includes the following stages:

1. Establishing an assessment framework / plan (using the “before” and “after” approach and controls);
2. Defining objectives;
3. Determining indicators;
4. Collecting data and monitoring techniques.

TAPESTRY is assessing each campaign’s performance against a common set of indicators to measure cost effectiveness, socio-economic influence and their contribution to long term sustainable travel patterns. This is termed the TAPESTRY Common Assessment Framework (CAF) and has been designed as an aid to better assess and hence understand the internal structure, impact and success (or otherwise) of the campaigns. It achieves this by setting out core indicators and descriptors to facilitate assessment of the effectiveness and efficiency of campaigns and by providing guidelines on the selection of the most suitable evaluation tools, sampling methods, and data collection options.

The CAF is set against the background of a new model developed as part of the project called the “Seven Stages of Change”. This model builds on earlier research into behavioural change and attempts to set out the stages in the process of changing travel behaviour to assist the campaign initiators in the planning and targeting of their campaign and provide a “barometer” against which any progress that individuals exposed to a campaign make towards the ultimate goal of lasting behavioural change.

The model sets out a seven stage process:

1. Awareness of problem
2. Accepting responsibility
3. Perception of options
4. Evaluation of options
5. Making a choice
6. Experimental behaviour *
7. Habitual behaviour *

*There are some cases where behaviour is a one-off event for a given individual (e.g. making a visit to a particular area as a tourist). Here the notions of ‘experimental’ and ‘habitual’ behaviour are not applicable and they reduce to one-step, assessing whether behaviour was influenced by the campaign.

To assess the TAPESTRY campaigns, the model foresees ten factors to be analysed:

- ? Strategic policy objectives;
- ? Non-campaign measures;
- ? Campaign initiator;
- ? Campaign objectives (operational targets);
- ? Inputs;
- ? Campaign management;
- ? Outputs;
- ? External factors;
- ? Campaign recall;

? Campaign impacts.

and supplies a suggested methodology for each factor to be measured in a standard way within each of the TAPESTRY case study campaigns.

Use of the Common Assessment Framework is helping TAPESTRY translate the lessons learned from the case studies into a series of outputs such as best practice guidelines designed to improve the process of campaign building and implementation in the future. Similarly, application of the CAF to a wide range of campaigns in a controlled environment will allow it to be tested and improved prior to being launched as a proactive tool for the design and assessment of future campaigns.

A full analysis of the management process involved in developing the campaign framework is available to those campaigning organisations that are interested in an assessment of their own internal functioning. A method of assessing the actual campaign material and providing a design guidance checklist is also under development as part of the process of assessing the effectiveness of the individual TAPESTRY campaigns.

When completed at the end of 2003, the output from TAPESTRY will increase the knowledge and understanding of how effective communication programmes or campaigns can be developed to support and encourage sustainable travel behaviour throughout Europe. Hence, the tools and manuals which will be produced at the conclusion of the project in late 2003 will enable the production of more cost effective campaigns, reaching greater numbers of people and bringing about higher levels of behaviour change and so will be of direct interest to transport policy makers, managers and operators across Europe. The project will deliver:

- ? A review of EU funded research identifying best practice in travel awareness campaigns;
- ? Development and implementation of 15 different case studies;
- ? Assessment and cross site comparison of case study results;
- ? Dissemination of the results and recommendations from the case studies.

The outputs from TAPESTRY will be:

- ? Development of best practice guidelines for those who wish to bring about changes in travel behaviour;
- ? Highlighting the contribution of communications initiatives to achieving policy objectives at the local, regional, national and European levels;
- ? Detailed reports on how travel awareness, communication, education and publicity measures were developed within each case study;
- ? Assessment of which communication techniques and campaign types were most successful at supporting behavioural change in the contexts tested within TAPESTRY.

For more information about TAPESTRY see www.eu-tapestry.org

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