Evaluation of the Marco Polo Programme
2003-2010

Final Report
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The Effectiveness of Traffic Avoidance Actions

The Need to Differentiate between Transport Modes with Regard to the Conditions for Funding on the basis of Safety, Environmental Performance and Energy Efficiency

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EXECUTIVE SUMMARY

1.1 This study was carried out by Europe Economics on behalf of Directorate-General for Mobility and Transport (DG MOVE) between October 2010 and February 2011. Its purpose was to assist in the evaluation of the Marco Polo programme covering the period 2003-2010.

1.2 In general terms, the Marco Polo programme aims to relieve congestion on road networks and improve the environmental performance of Europe's transport system by providing financial incentives for relevant companies to use alternative methods of transport with generally lower environmental impacts, in particular railways, inland waterways and short sea shipping.

1.3 The Marco Polo programmes provide funding to the transport and logistics sector, as well as other relevant businesses, to support or subsidise certain actions that result in a shift of transport off the road. The first programme (Marco Polo I) had a budget of €102 million and ran from 2003 to 2006. The second programme (Marco Polo II) had a substantially increased budget of €450 million and runs from 2007 to 2013. Three types of actions were envisaged in Marco Polo I and two more are permitted under Marco Polo II. The action types supported through Marco Polo are:

(a) modal shift actions;
(b) catalyst actions;
(c) common learning;
(d) motorways of the sea; and
(e) traffic avoidance actions.

1.4 The underlying rationale for the programme is that there are a number of market failures or regulatory failures in the field of transport that mean that, in the absence of policies of this sort, more freight would be transported by road than is optimal for the EU economy or citizens. This is largely because road transport generally tends to generate significantly more negative environmental and other externalities than alternative modes of transport.

1.5 In evaluating the Marco Polo programme, we reviewed documents provided by DG MOVE and Executive Agency for Competitiveness and Innovation (EACI) and conducted other desk research, analysed data provided by EACI (including geospatial analysis) and undertook a data collection exercise that involved dissemination of a survey and stakeholder interviews.

1.6 The data held by EACI were the main source of information for the study since EACI, as the body in charge of the implementation of the Marco Polo programme, has responsibility for monitoring and keeping detailed records of project performance. Our
Executive Summary

largely quantitative analysis of these data was supplemented by an ad hoc survey and a series of in-depth interviews with some of those closely involved in the projects.

1.7 We received 79 responses to the survey: five successful applicants under both Marco Polo I and II; two successful applicants under Marco Polo I only; 29 successful applicants under Marco Polo II; 12 unsuccessful applicants; and 31 companies that did not apply for either Marco Polo program. Our interviews were with five beneficiaries of Marco Polo I funding, nine beneficiaries of Marco Polo II funding, three unsuccessful applicants and three non-applicants.

Key Evaluation Results: Marco Polo I & II

1.8 The main objectives of the programme are to reduce congestion, to improve the environmental performance of the transport system and to enhance intermodal transport, thereby contributing to an efficient and sustainable transport system which provides European Union (EU) added value without having a negative impact on economic, social or territorial cohesion.

1.9 The programme should achieve, by its end, a substantial traffic shift from international road freight traffic to short sea shipping, rail and inland waterway transport, or to a combination of modes of transport in which road journeys are as short as possible.

Effectiveness

Modal shift, catalyst, motorways of the sea and traffic avoidance actions

1.10 For actions that had a modal shift objective (modal shift actions, catalyst actions, motorways of the sea actions and traffic avoidance actions), effectiveness is measured by comparing the achieved and expected tonne kilometres of the different projects. At programme level, we compare the sum overall achievement of modal shift relative to that expected.

1.11 Table 1.1 shows the total modal shift that was expected and achieved for each year of call under Marco Polo I. As all but one of the Marco Polo I projects are either closed or stopped and a realistic projection has been made for the two remaining final projects, these figures should provide an accurate representation of the success of projects financed under the first Marco Polo programme. It is evident that there is significant underachievement of anticipated modal shift in all years of Marco Polo I.

1.12 Table 1.2 shows the total modal shift that was expected and achieved for each year of call in Marco Polo II. It should be emphasised that the figure of achieved modal shift will increase over time for the call years of 2007-2009 as many of these projects are still ongoing at an early stage, and hence the final percentage of expected modal shift that will be achieved will be greater than the figures presented in the table.

1.13 It should be noted, that total volume of reported modal shift corresponds to the yearly average modal shift of 20 billion tkm as targeted by the programme. However, this figure
is likely to fall from 2009 onwards following the increase of funding intensity from 1 to 2 euro per 500 tkm shifted off the roads, which was not matched with a corresponding overall budget allocation to the programme.

Table 1.1: Marco Polo I — total modal shift by call

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>12,396</td>
<td>14,382</td>
<td>9,535</td>
<td>11,401</td>
<td>47,714</td>
</tr>
<tr>
<td>Achieved (Mtkm)</td>
<td>7,253</td>
<td>6,326</td>
<td>4,510</td>
<td>3,373</td>
<td>21,462</td>
</tr>
<tr>
<td>%</td>
<td>58.51</td>
<td>43.99</td>
<td>47.30</td>
<td>29.59</td>
<td>44.98</td>
</tr>
</tbody>
</table>

Source: EACI data

Table 1.2: Marco Polo II — total modal shift at Mid-December 2010 by call

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>27,835</td>
<td>16,334</td>
<td>17,177</td>
<td>61,285</td>
</tr>
<tr>
<td>Achieved at mid-December 2010 (Mtkm)</td>
<td>6,562</td>
<td>1,703</td>
<td>380</td>
<td>8,645</td>
</tr>
<tr>
<td>% at mid-December 2010</td>
<td>23.58</td>
<td>10.43</td>
<td>2.22</td>
<td>14.11</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time. Figures for traffic avoidance actions are the tonne kilometre equivalent of vehicle kilometres.

Traffic avoidance and common learning actions

1.14 It is too early to fully assess the effectiveness of traffic avoidance actions, though the achieved figures at mid-December 2010 have been included in Table 1.2. As of mid-December 2010, only two such actions have received funding, both in the 2009 call. Data on the success of these projects are, hence, limited at present. One project had, at mid-December 2010, achieved 3.1 per cent of its forecast modal shift while figures for the other project have not yet been received by EACI.

1.15 Based on a review of the final approved report of all five common learning actions in the 2005-2007 calls, and the “fiche de trasfert” for the two awarded funding in the 2004 call, it appears that they have been relatively successful in achieving their stated objectives. Indeed, a number of projects having a success rate of 100 per cent. For this type of project, however, there is an important difference between noting whether the project achieved the stated operational objectives and assessing whether the project has a real effect on the practices of logistics and other companies concerned; or on the likely future growth in intermodal transport. The evidence on this latter point is less clear.

Environmental benefits

1.16 Applicants for funding under the Marco Polo programme are required to present in their proposals a forecast of environmental benefits that will be achieved through the project. Such estimates are formed using the Marco Polo calculator, a pre-formatted Excel
spreadsheet that is available in the application packs for each call via the Marco Polo website.

1.17 The Marco Polo calculator is widely considered to be outdated and hence does not provide accurate estimates of the environmental benefits that might be achieved by each project. This presents a problem for quantifying the aggregate environmental achievement of the Marco Polo programme.

1.18 Our analysis has shown that the percentage achievement of foreseen environmental benefits follows a similar pattern to that of modal shift.

1.19 The European Commission (EC) commissioned a revision of the calculator and organised an external review of the revised calculator which was finalised in January 2011. The key finding of the external review was that while the proposed new version of the calculator is an improvement on the previous version, there remains scope for further fine-tuning. In general, the output of calculator was considered adequate for comparative purposes (i.e. between different Marco Polo projects) but the external reviewers noted that it is not considered adequate for producing quantitative assessments of the externalities of a specific transport service.

Efficiency

1.20 One indicator of the efficiency of a project is the ratio of outputs (in the case of projects with a modal shift objective, tkm achieved) to inputs (in this case € in the committed budget or the amount of money actually paid to projects). A greater ratio implies that the project had greater efficiency, in that more freight was shifted per € of subsidy committed or paid.

1.21 At this point, it should be noted that there is an observed decrease in the efficiency during the Marco Polo II programme. This can be explained by changes to the rules governing projects, in particular the doubling in the funding intensity (new projects were funded since the 2009 call at a rate of €2 per 500tkm / 25vkm, when the previous rate was €1 per 500tkm achieved or 25 vkm avoided) and the new definition of modal shift (valid as from call 2010 and later) introduced by Regulation EC 923/2009.

1.22 Table 1.3 shows the efficiency that was achieved in Marco Polo I while Table 1.4 shows the efficiency that has been achieved at mid-December 2010 in Marco Polo II. Both of these tables are based on funds that were committed to projects rather than funds actually paid to those running projects. The rationale for including this efficiency measure is that once money is committed to projects it is ‘tied-up’ and cannot be put to other uses, even if projects are struggling and clearly will not be granted the full amount. This point is discussed in greater detail below together with options for reducing the severity of this problem in the future.
Table 1.3: Marco Polo I — efficiency by call (committed funds, projects other than catalyst actions and common learning actions)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>573</td>
<td>307</td>
<td>252</td>
<td>212</td>
<td>326</td>
</tr>
</tbody>
</table>

Source: EACI data

Table 1.4: Marco Polo II — efficiency at mid-December 2010 by call (committed funds, projects other than catalyst actions and common learning actions)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>761</td>
<td>538</td>
<td>288</td>
<td>486</td>
</tr>
<tr>
<td>Efficiency achieved at mid-December 2010 (tkm / €)</td>
<td>210</td>
<td>83</td>
<td>23</td>
<td>127</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Figures for Marco Polo II relate to projects that are currently still ongoing and it is likely that such figures increase over time.

1.23 Table 1.5 shows the project efficiency based on funds actually paid to beneficiaries under Marco Polo I. Figures are not available for Marco Polo II at present as these projects are ongoing and hence final payments to beneficiaries have not yet been determined.

1.24 There is a crucial distinction between these figures and those presented above based on committed funds since beneficiaries are reimbursed on the basis of project results and are not paid the full amount committed to their project unless all objectives are met.

1.25 If all projects achieved 100 per cent of the objectives, the efficiency figures based on committed funds and paid funds would be the same. However, the vast majority of actions have achieved less than 100 per cent and hence the efficiency of projects measured through committed funds is less than efficiency figures estimated on the basis of paid funds. This is clearly illustrated by comparing Table 1.5 with Table 1.3.

Table 1.5: Marco Polo I — efficiency by call (paid funds, projects other than catalyst actions and common learning actions)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>918</td>
<td>595</td>
<td>672</td>
<td>501</td>
<td>679</td>
</tr>
</tbody>
</table>

Source: EACI data

1.26 For Marco Polo I projects as a whole, the efficiency expected was, on average, 741tkm per € of subsidy. It is interesting to note that some projects achieved more than 100 per cent of their objectives but could not receive more than the maximum subsidy specified in the Grant Agreement. In contrast, some projects significantly under-achieved their objectives.
Executive Summary

1.27 The average outturn of 326tkm per € of subsidy when measured on the basis of committed funds and 679 tkm per € of subsidy when measured on the basis of paid funds demonstrates that projects were less successful than had been expected. Moreover, efficiency fell significantly in the 2006 call, possibly as a result of a more difficult economic climate or because applicants had learnt how to ‘game the system’ when applying for funds and hence overstated expected modal shift compared with what would have been realistic objectives.

1.28 Nonetheless, the fact that payment to beneficiaries is conditional to the achievement of results is an important and positive aspect of the Marco Polo programme design, despite the negative side effects of under-use of committed budget. Such a feature ensures that the incentives of beneficiaries and taxpayers are aligned and there is no other mechanism that would provide stronger incentives for projects to succeed.

1.29 An additional element to consider in this analysis is the leverage effect of the Marco Polo programme, i.e. the value of private investment per €1 of EU subsidy. For Marco Polo I, the foreseen EC contribution was approximately between 2 and 10 per cent of the total project budget,\(^1\) indicating that each euro of EC funding was associated with between €1 and €9 private investment. Whether this foreseen leverage effect was fully achieved is unclear since we are unaware of the total final project budgets (though we do know the final EC contribution).

Deadweight

1.30 In an evaluation of the effectiveness of a programme of public subsidy of private sector economic activity, the question of deadweight has to be confronted. If an activity that would have taken place without subsidy receives a subsidy, there is no benefit to the taxpayer and the subsidy paid is “deadweight” on the overall effectiveness of the programme.

1.31 As indicated, the information on deadweight can be obtained from the results of the questionnaire survey. Of 33 respondents to a question in the beneficiaries’ survey on whether the projects would definitely have gone ahead in the absence of Marco Polo funds, 14 (i.e. 42 per cent) stated that they would. Forty five per cent of respondents to the unsuccessful applicants’ survey (i.e. 5 of 11 respondents to the question) stated that the projects had gone ahead without funding from the Marco Polo programme. Although it was outside the scope of this project to investigate the circumstances of each case sufficiently to be sure that these judgements are reasonable, there would if anything be likely to be a bias in respondents’ replies in favour of saying that the projects were dependent on the subsidy. Hence, the finding that a significant proportion of projects would have gone ahead without Marco Polo funding questions whether or not the

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\(^1\) Except for CLA where a maximum of 50 per cent is applicable
programme is fully ‘adding value’ to what could be achieved through private sector funding.

Contribution and legacy of the programme

1.32 Of 32 respondents to a survey question on the legacy of projects financed under the Marco Polo programme, 23 (i.e. 72 per cent) stated that the projects would continue (for Marco Polo II) and have continued (for Marco Polo I) following the end of the Grant Agreement of Marco Polo. This is an encouraging finding since it indicates that short-term funding may have created long-term change, although in this case there is a risk of existence bias and response bias (explained in greater detail at paragraph 4.72) that may mean that the estimate is exaggerated to some extent.

Competition issues

1.33 A growing number of complaints about the distortion of competition have been lodged by competitors to Marco Polo beneficiaries and these complaints have also come earlier in the project cycle. Indeed, while just one competition complaint was received for projects in the 2007 call, two complaints were received for projects in the 2008 call and 10 complaints were received for projects in the 2009 call. An advance complaint has been received for a proposal submitted under call 2010.

1.34 A summary of competition complaints received to date is provided in the table below.

Table 1.6: Competition Complaints Statistics (calls 2007-2010)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of projects affected</th>
<th>Number of Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Rail</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Rail/Maritime</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1.35 An EACI analysis of the competition complaints that have been received has concluded that complaints are generally not based on factual competition elements but rather "company feelings" about competitors receiving Marco Polo subsidies. Based on our survey and interview programme, beneficiaries and unsuccessful applicants generally feel that Marco Polo does not have any adverse competition effects whereas those that did not apply for funding under the programme feel the programme has been detrimental to competition.

1.36 However, it is not clear to Europe Economics that there has been any significant adverse competition effects in any real economic sense (for example in terms of creation of a dominant market position, abuse of market power, collusion and so on) rather than simply the potential loss of market share on some routes.

1.37 The consequences of competition complaints are:

(a) difficulty for the programme to function correctly;
(b) difficulty in daily operational management of the programme; and
(c) impact on the credibility of the programme.

Management evaluation

1.38 One of the most important changes over the life of the programme was the transfer of management in 2008 from the Commission to the EACI. Several performance measures indicate an improvement in the indicators from 2008. These are: an increase in the number of applications received which required more managerial time for processing and evaluating; a reduction in the average time to contract and a reduction in the average days of receiving payment, for the years 2008, 2009 and 2010 (no data was available before 2008, but reports from EACI indicate a number of improvements in the management requirements and performance of the programme from 2008 onwards).

1.39 Judging by the responses to our survey and interviews with those that have received funding under the programme, this change has led to an improvement in its operational management. Nevertheless, an important part of the improvement experienced since 2008 can undoubtedly be attributed to increased staffing. In turn, this has allowed EACI to step up communication efforts and to provide increased assistance to applicants by setting two new functional mailboxes and a help desk with a dedicated phone number for solving queries about the programme.

1.40 Based on information from EACI we have examined the correlation between the credibility score of the proposals and the Modal Shift effectively achieved by the actions. The main conclusion of the analysis is that the proposal scores and actions results are, perhaps counter intuitively, uncorrelated. This means that the drafting and quality content of a proposal is not an indication of the likely success of the action. It also suggests that EACI may consider introducing some modifications to the evaluation process unless they have any negative impact on the overall programme efficiency and effectiveness.

1.41 We explored the similarities and differences between the management of the Marco Polo programme by EACI and the management of the Trans-European Transport Network (TEN-T) programme by Trans-European Transport Network Executive Agency (TEN-T EA). We find that given the current structure of the programmes, there is limited potential for synergies in programme management to be exploited. Indeed, there appear to be clearer synergies between the various programmes managed by EACI, including Marco Polo, than there are between the management of Marco Polo and TEN-T.

1.42 This is because the beneficiaries of the projects are generally very different, which encompass projects of different contractual nature with different management needs. Finally, the two programmes face a very different legal and financial environment.

Relationships between Marco Polo and Other Programmes

1.43 Complementarities exist between the Marco Polo programme and programmes that seek to improve the infrastructure and/or competitiveness of non-road transport modes. Such
programmes include TEN-T, the European Regional Development Fund, the Cohesion Fund, the Competitiveness and Innovation framework programme and the FP7 programme.

1.44 In some cases, it appears that the Marco Polo programme uses similar means to achieve similar goals as other programmes. For example, the Seventh Framework Programme (FP7) and the Intelligent Energy Europe Programme (IEEP, one component of the Competitiveness and Innovation Programme - CIP) both provide funding for common learning type of actions and hence there may be scope for concentrating funding of this type of actions within one of the programmes.

1.45 The Ecobonus, an Italian state aid scheme which has also known similar applications in a limited number of regions, seeks to achieve modal shift through payments to road transport companies using alternative modes of transport and there may be possible synergies with such programmes also.

Conclusions and Recommendations

1.46 The Marco Polo programmes were set up as a funding instrument addressing market failures in the freight transport sector, which occur at the scale of the EU and beyond. Unique and important features of the programme are its transparency, the almost numerical precision with which results can be measured and quantified and the direct relationship between EU funding and the results obtained. Furthermore, the devolved management of the programme has strengthened its implementation and allowed the Commission to concentrate on policy issues. However, the programmes have also suffered from a number of flaws inherent in their design, which have come to the surface during the course of their implementation, and particularly so under the strain of the economic crisis.

1.47 The Marco Polo programmes have not fully achieved or are unlikely to fully achieve the goals set to them before coming into being. In particular, there has always been a significant underachievement of modal shift (less than 60 per cent has been achieved in every call) and there is no reason to believe that this will be any different for ongoing projects under Marco Polo II.2

1.48 In addition to this, there are increasing concerns about adverse competition effects of the programme, the avoidance of which is a pre-requisite for receiving Marco Polo funding. However, Europe Economics considers that it is important that a successor to the Marco Polo programme is introduced since this is currently the only European financial

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2 The programme has suffered from lack of uptake by the market. Indeed, only in the early years of Marco Polo was there a significant reserve list of candidate projects and the doubling the funding intensity has only partly managed to remediate the problem. Furthermore, the programme, with its very prescriptive rules, has proven to be inflexible and incapable of adapting to new challenges raised for instance by the economic crisis. The focus on support for start-up of new transport services or significant upgrades of existing ones makes the programme prone to potential problems of distortion of competition even if there are safeguards established in order to avoid a degree of distortion which goes against the common interest.
instrument that allows significant means to be devoted to the improvement of environmental efficiency for freight transport, a reduction in greenhouse gas emissions and reduced congestion on European road networks. However, it is acknowledged that this does not necessarily mean that the focus need remain on support to modal shift.

1.49 This suggests that there is a clear argument that modifications to the programme are required if a successor to the programme is to be introduced. We propose several potentially complementary options that are in line with the broad aims of the new White Paper to establish a single transport area, promote technological development and invest in the multi-modal transport network.³

**Alternative ways of promoting modal shift**

1.50 One possibility for the future of the Marco Polo programme would be to continue with the approach of encouraging modal shift towards non-road freight transport but to revise the specific details of how this objective is achieved.

1.51 For instance, funding could be provided to compensate road transporters for shifting cargo onto non-road transport modes rather than providing funding to the operators of non-road transport modes. This may help to alleviate some of the concerns expressed in survey and interview responses as regards distortion of competition, as not the operators but the users of transport are receiving financing.

1.52 One possibility for alternative implementation would be through the Member States rather than providing subsidies directly to private companies. In particular, the aid given to the road transport companies could be based on a public intervention in the form of partial reimbursement of invoices for alternative methods to road transport, irrespective of whether or not the logistics chain was using the alternative transportation means beforehand. Another possibility of implementation is through an electronic pass which could record the voyages made on more environmentally friendly transport modes.

1.53 However, before introducing such a scheme, Europe Economics advises to analyse in further detail a number of issues of potential concern, such as the impact on bureaucratic burden, the efficiency and leverage of the scheme compared to the current Marco Polo programme, the impact on the transport market, the potential legacy of such a scheme, the issue of distortion of competition between corridors and the mechanisms to be put in place to safeguard the taxpayers' interests.

**From modal shift to direct promotion of innovation, efficiency and sustainability**

1.54 A second option for the future of the Marco Polo programme would be to change the focus from modal shift to an alternative approach to achieving the broad goals of creating

³ WHITE PAPER, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system; COM(2011) 144 final
a sustainable transport system and, in particular, reducing the environmental cost resulting from the movement of freight across the EU and to close third countries.

1.55 Such an approach could consist of targeting EU support to investments and actions which lower the emissions of CO$_2$ of freight transport (and associated other external costs), thereby directly contributing to the objectives of the EU 2020 Strategy. This policy could, for example, compensate undertakings for improving the energy efficiency of the transport unit, even without changing transport mode (e.g. by switching from a high-emission vessel to a low emission vessel).

1.56 The approach should encompass the identification of investment opportunities and actions that merit EU funding support. Such assessment should be conducted in close partnership with the sector and be sufficiently flexible so as to seize the opportunity of new technological developments as they arise.

1.57 Such a programme structure would more directly target the aims of the programme (i.e. to improve energy efficiency and sustainability of freight transport) and it is possible that funding conditions could be simplified. In particular, this programme structure could be implemented through offering part-finance for the purchase of cleaner vessels, trucks etc. and hence would be a one-off payment to companies rather than ongoing support and monitoring over a number of years. This would make the operational management of the programme far simpler than at present.

1.58 Another advantage of this policy option would be that the programme would become more attractive to insular and archipelagic Member States than it is at present. Such states currently have some limited opportunities to benefit from the programme because of the limited possibility of achieving modal shift / traffic avoidance within their geographical boundaries. If the successor to the Marco Polo programme were to compensate for switching to more energy-efficient modes of transport it would become more attractive for the insular and archipelagic Member States to participate in the programme.

Expand the scope of the programme

1.59 Several options exist for expanding the scope of the programme beyond its current focus on modal shift for international freight transport.

1.60 One possibility would be for the successor to the Marco Polo programme to incorporate a specific type of action to support sustainable urban freight and logistics. For example, an action to support companies in switching from petrol to electric trucks for urban road transport and logistics could be defined. Another possibility would be to support multimodality in long-distance passenger transport in addition to long-distance freight transport.

1.61 A detailed analysis of the potential overlap of the successor to the Marco Polo programme with existing programmes would need to be undertaken in the event that the scope of the
Executive Summary

programme were to be expanded. It should be noted that this is a general comment and is not restricted to the specific suggestions of the previous paragraph.

Expand the range of support instruments

1.62 The Marco Polo programme provides grants as a support for the start-up of actions directed to shifting freight transport off the road.

1.63 There are alternative ways of providing financial support, and these should be investigated further with respect to their strengths and weaknesses for each of the actions and objectives envisaged. For example, the successor of Marco Polo could take the form of other financial instruments such as loans, subsidised loans or guarantees, which would help finance the needed investments.

1.64 There are several potential advantages of changing the support instrument. Most clearly, the new support scheme could be designed in a way that would allow flexibility in redirecting the funds to alternative projects with similar objectives. This would make it particularly interesting in situations with changing market conditions. Loans could be also used as revolving fund if the repayment of the loan and interest are used to replenish the fund for further loans. This could increase the access to finance for SMEs’ transport operations and would also benefit from associating financing institutions’ expertise for assessing investment opportunities. Finally, loans could also be designed so as to reduce the administrative burden and the costs of monitoring of achieved results, and could potentially benefit from synergies or programmes from other institutions such as the European Investment Bank or the European Investment Fund. Nevertheless, this type of intervention could potentially interfere in the level playing field of operators and, similarly to the current Marco Polo, should be designed in order to avoid undue distortion of competition.

Improve synergies with the new TEN-T policy options

1.65 In the future, the successor to the Marco Polo programme could potentially operate within the revised framework of TEN-T, within the framework of a broader coherent multi-modal TEN-T network which is implemented through “corridor” approaches. In particular, following designation of the multimodal core network, coordination and promotion of funding support could take place within the context of the TEN-T implementation, ensuring that synergies are exploited between infrastructure funding priorities and support to making the use of infrastructure more sustainable.

1.66 As for the introduction of a modal shift compensation approach, the identification of supported corridors would under this option be made consistent with the corridors identified under the TEN-T policy. With this joined-up approach of providing finance to transport infrastructure and service along the main corridors, both infrastructure and transport operations could obtain finance from the more broadly defined TEN-T programme.
This approach is attractive in the sense that the core network and corridors will include the most important European traffic flows and it is likely that these routes are some of the most congested in Europe at the current time and generate the highest external costs. Therefore, focusing the implementation of the instrument on these routes would, arguably, have a greater positive impact on congestion and the environment and on the overall efficiency of the instrument.

As for the direct promotion of energy efficiency and sustainability option, again, it would be possible to incorporate this policy option within the revised TEN-T framework such that promotion and support for implementation of the funding instrument would be coordinated in the framework of the TEN-T policy, even if the instrument as such should be more widely applicable than for transport on TEN-T links and nodes only.

**Funding structure**

Irrespective of the particular approach taken by the successor to the Marco Polo programme, the funding model may be amended from its current structure. In particular, we consider that adopting a ‘staged’ funding approach would help to avoid outcomes of significant committed but non-allocated European funds. Indeed, TEN-T EA currently allocates funds for TEN-T using an instalment approach, such that it is not necessary to commit all funding for a project at the very beginning. This mechanism allows for recycling a substantial proportion of funds to new calls for proposals when needed and for an ultimately more productive use of European funds.
2 INTRODUCTION

2.1 In general terms, the Marco Polo programme aims to relieve congestion on road networks and improve the environmental performance of the intermodal transport system by providing financial incentives for relevant companies to use alternative methods of transport, including railways, inland waterways and short sea shipping.

2.2 The underlying rationale for the programme is that there are a number of market failures or regulatory failures in the field of freight transport that mean that, in the absence of policies of this sort, more freight would be transported by road than is optimal for the EU economy or citizens. This is largely because road transport tends to generate significantly more negative environmental externalities than alternative modes of transport.

2.3 The Marco Polo programme is important as it is currently the only European financial instrument that focuses on the improvement of environmental efficiency for freight transport. Given that the freight transport sector accounts for approximately 28 per cent of total road transport CO₂ emissions, the existence of a policy designed to limit the emissions of this sector is an important step towards increasing the sustainability of transport in Europe.⁴

Programme Context and Foreseen Achievement

2.4 The background and context to the programme were provided by the 2001 White Paper on Transport and the Marco Polo II Regulation. The White Paper forecast that if no action were taken, road freight transport would increase by around 50 per cent by 2010 and that international (cross-border) road freight transport would approximately double by 2020. Recital 2 of the Marco Polo II Regulation stated that in the absence of decisive action, European road freight transport would increase by more than 60 per cent by 2013 and international road freight transport would grow by an estimated 20.5 billion tonnekilometres per year between 2007 and 2013.

2.5 To assess the impact of the Marco Polo programme we can compare its current performance with a situation where the programme had not been in place (the counterfactual, or what would have happened over the relevant period in absence of the programme). The proper definition of the counterfactual is always a difficult exercise. For the purposes of illustrating the size and relevance of the programmes we shall use the forecast in the White Paper as this is the relevant basis for the introduction of the first Marco Polo programme.

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⁴ Calculation based on the “EU energy and transport in figures: Statistical Pocketbook 2010” which states that road transport CO₂ emissions were 905 million tonnes in 2007. Freight transport emissions were approximately 256 million tonnes in the same year according to the European Environment Agency (see http://www.eea.europa.eu/data-and-maps/figures/specific-co2-emissions-per-tonne-1/term27_2010_figure2.xls/at_download/file).
2.6 Figure 2.1 shows the observed evolution of freight in the EU by mode of transport over the period 1995 to 2008. Road freight transport increased from approximately 1,519 billion tonne-kilometres from 2000 to 1,915 billion tonne-kilometres in 2007, and then dropped to 1,878 billion tonne-kilometres in 2008. This represents an increase of around 23 per cent between 2001 and 2007 and around 20 per cent between 2001 and 2008, both of which are significantly below the forecast of 50 per cent predicted by the White Paper for 2001-2010.

**Figure 2.1: EU-27 freight transport by mode, billion tonne-kilometres**

Source: EU energy and transport in figures: Statistical Pocketbook 2010

2.7 Very little of this change in road freight transport can be explained by the Marco Polo programme and much can simply be explained by the economic cycle, changes in the structure of business and European business requiring fewer goods to be transported. Indeed, the trend growth rate in road freight transport and sea transport appear to be the same in the post-Marko Polo period as it was in the period prior to the programme, suggesting that the programme may have had little observable impact on the European transport sector as a whole. However, rail freight transport has been increasing steadily since the introduction of the Marco Polo programme whereas it was relatively stagnant between 1995 and 2003.

As indicated by selected projects. For Marco Polo II the data covers Calls 2007, 2008 and 2009.

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5 Indeed, the trend growth rate in road freight transport and sea transport appear to be the same in the post-Marko Polo period as it was in the period prior to the programme, suggesting that the programme may have had little observable impact on the European transport sector as a whole. However, rail freight transport has been increasing steadily since the introduction of the Marco Polo programme whereas it was relatively stagnant between 1995 and 2003.

6 As indicated by selected projects. For Marco Polo II the data covers Calls 2007, 2008 and 2009.
Thus, Marco Polo I expected an impact of less than 0.7 per cent of the total road freight volume over the programme funding period 2003-2006. Given that some projects would undershoot the targets, the final realised amount would be even smaller and hence the impact of the programmes would not be evident on Figure 2.1. The same is likely to be true for Marco Polo II but final figures on the total modal shift will not be available until quite some time after the funding period has ended in 2013.

Table 2.1 shows that the proportion of freight transport that crosses national boundaries increased from 28.3 per cent in 2000 to 32.6 per cent in 2006, remaining at approximately this level in 2007 and 2008. The volume of international road transport increased from approximately 430 billion tonne-kilometres in 2000 to 623 billion tonne-kilometres in 2007 before falling to approximately 610 billion tonne-kilometres in 2008.

<table>
<thead>
<tr>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
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<tbody>
<tr>
<td>Total (billion tkm)</td>
<td>1,519</td>
<td>1,800</td>
<td>1,854</td>
<td>1,915</td>
</tr>
<tr>
<td>International (billion tkm)</td>
<td>430</td>
<td>568</td>
<td>604</td>
<td>623</td>
</tr>
<tr>
<td>Percentage international</td>
<td>28.3%</td>
<td>31.5%</td>
<td>32.6%</td>
<td>32.5%</td>
</tr>
</tbody>
</table>

Source: EU energy and transport in figures: Statistical Pocketbook 2010

Marco Polo I achieved a modal shift of 21.4 billion tonne-kilometres, 44.98 per cent of that forecast. This represents approximately 1 per cent of the volume of international road haulage between 2003 and 2006, the funding period of the first Marco Polo programme, and approximately 0.3 per cent of all road freight transport. Presenting the statistics in an alternative form, this is approximately 23.5 per cent of the increase in international road haulage between 2003 and 2006 and approximately 12.9 per cent of the increase in road freight transport over the same period.

The performance of the programme has to be evaluated in the context of the changing world economic climate. In this respect, it should be noted that there has been a significant drop in transport volumes, both national and international, since 2007. The start of this decline is evident in Figure 2.1 but a further decline has been observed in 2009. Indeed, national road freight transport volumes were three per cent lower in the fourth quarter of 2009 than in the corresponding quarter of 2008 while international road transport volumes fell by two per cent over the same period.

The European Sea Ports Organisation (ESPO) has reported that total throughput at European ports (measured in tonnes) decreased by 15 per cent between the first 6
months of 2008 and the same period in 2009. Total throughput for the first half of 2010 was 7.8 per cent greater than the 2009 figure and hence still below the 2008 level.

2.13 Significant declines in rail freight transport volumes have been observed across Europe. Indeed, only two countries recorded growth in the last quarter of 2008 compared to the same quarter in 2007 (Latvia registering impressive growth of almost 11 per cent) and all other countries registered a decline in the same period. Double-digit losses were experienced in 14 countries, the greatest of which were Luxembourg (-30 per cent), Greece (-26 per cent) and Belgium (-24 per cent).

2.14 It is interesting to note that road freight transport has suffered a lower decline in transport volumes than other transport modes. One explanation for this might be that road transporters have lowered prices in an attempt to retain market share and discourage modal shift away from the road. Indeed, Eurostat has reported that road freight prices have been under pressure since peaking in the third quarter of 2008 and in the fourth quarter of 2009, they were 2 per cent below their level in the corresponding quarter of 2008. Anecdotally, we have been informed that road transport prices have been lowered in some cases by as much as 50 per cent.

2.15 Such reductions in the cost of transporting freight by road would provide a significant disincentive to switch to non-road modes of transport and would provide a positive incentive to switch from non-road transport to road transport (“reverse modal shift”). This situation would make it more difficult for recipients of Marco Polo funding to meet the forecast modal shift volumes.

Description of the Programme

2.16 The Marco Polo programmes provide funding to the transport and logistics sector, as well as other relevant businesses, to support or subsidise certain actions that result in a shift of transport off the road. The first programme (Marco Polo I) had a budget of €102 million and ran from 2003 to 2006. The second programme (Marco Polo II) had a substantially increased budget of €450 million and runs from 2007 to 2013. Three types of actions were envisaged in Marco Polo I and two more are permitted under Marco Polo II. The action types are:

(a) modal shift actions — shifting as much freight as possible from road to short sea shipping, rail and inland waterways (both programmes);

(b) catalyst actions — changing the way non-road freight transport is conducted in the Community and overcoming structural market barriers in European freight transport through a breakthrough or highly innovative concept (both programmes);

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8 European Sea Ports Organisation (2010), "Traffics Data up to Second Quarter of 2010", Section II-1, Page 4
common learning actions — enhancing knowledge in the freight logistics sector and fostering advanced methods and procedures of co-operation in the freight market (both programmes);

(d) motorways of the sea — any innovative action directly shifting freight from road to short sea shipping. It is permitted to combine short sea shipping with other transport modes including rail, inland waterways or a combination of modes of transport in which road journeys are as short as possible (Marco Polo II only); and

(e) traffic avoidance actions — any innovative action integrating production into transport logistics to avoid a large percentage of transport of any mode while maintaining overall production output and production workforce on EU territory (Marco Polo II only).

While both Marco Polo programmes share the same general objectives, there are some important differences between them as the result of changes introduced in the Marco Polo II regulation. In addition to the introduction of two new action types described above and a higher budget and extended duration for the programme, Marco Polo II differs from Marco Polo I in the following ways:

(a) Wider geographical scope — Marco Polo I provided funding to companies registered in Member States and, in certain circumstances, to applicants from EFTA/EEA and candidate countries. Marco Polo II allowed applicants from ‘close third countries’ to receive funding also under conditions of a partnership agreement between the countries concerned and the European Commission.\textsuperscript{10}

(b) Modified funding rules for modal shift and catalyst actions — funding intensity (i.e. the proportion of the project funded by the Commission) for modal shift actions increased from 30 per cent under Marco Polo I to 35 per cent of the eligible costs under Marco Polo II. Maximum duration of funding for catalyst actions increased from four to five years and minimum grant threshold increased from €1.5m to €2.0m.\textsuperscript{11}

(c) Increased support for ancillary infrastructure — Marco Polo II did not specify a maximum funding intensity for ancillary infrastructure, though DG TREN / DG MOVE has interpreted the limit to be 50 per cent of total expenditure necessary to achieve the action.\textsuperscript{12}


(d) New definition of eligible applicant — Marco Polo II allows, in exceptional cases, applications from a single undertaking established in an EU Member state if the proposal introduces a transport link from a Member State to a close third country.\(^\text{13}\)

(e) The concept of vehicle-kilometres was introduced to measure the contribution of traffic avoidance actions, defined as the “movement of a truck, loaded or empty, over a distance of 1 km”.\(^\text{14}\)

**Revision of Marco Polo II: Regulation (EC) No 923/2009**

2.18 Gellis Communications undertook a focus group of Marco Polo Committee members as part of a study for EACI in 2009. One conclusion that emerged from this focus group was that whilst the recognisable financial benefit of the Marco Polo programme is the main reason that companies apply for funding, there is an administrative problem and so companies see the application process as a trade-off between the effort involved and the concrete benefits. In particular, it was noted that for SMEs the cost of the application procedure is a crucial issue and it was noted that economic assistance is available in Norway for applicants facing this issue.

2.19 Regulation (EC) No 923/2009 aimed, among other objectives, to further increase participation in the Marco Polo programme by SMEs and to lower the minimum subsidy thresholds for different action types (and in particular for projects using inland waterways).

2.20 Specifically, Regulation (EC) No 923/2009 introduced the following changes (applicable as from call 2010):

(a) Lower thresholds — reduced thresholds for different action types, introduced concepts of ‘yearly’ rather than overall thresholds and introduced a very low minimum subsidy threshold for projects using inland waterways.\(^\text{15}\)

(b) Minimum duration of contracts and possibility for extension — a minimum duration of 36 months applies to catalyst, traffic avoidance and motorways of the sea actions while there is no minimum duration for modal shift and traffic avoidance actions. This implies some operational problems and the Commission is aware of this. Common learning actions may be extended by up to 26 months if positive results are achieved during the first 12 months of operation while other actions may be extended by up to 6 months in the event of extraordinary implementation delays

(c) New definition of freight — rather than modal shift being calculated on the basis of net freight transported the definition now includes the weight of the intermodal transport

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\(^{15}\) Regulation (EC) No 923/2009 of the European Parliament and of the Council, OJ L 266/2, 9/10/2009, Article 1(3) and Annex
and the road vehicle (including empty intermodal transport and road vehicles) where these are shifted off the road.\textsuperscript{16}

(d) Possibility of applications by single undertakings — it is no longer necessary to bid as part of a consortium.\textsuperscript{17}

(e) Financing of ancillary infrastructure — all action types other than common learning actions can now receive finance for ancillary infrastructure (up to 20 per cent of the total eligible costs of the action). Ancillary infrastructure is defined as adjustments to existing infrastructures that are necessary for carrying out the action but are not the main aim of the project, i.e. transport services.\textsuperscript{18}

Other Programme Developments

2.21 In addition to the changes brought in during the transition from Marco Polo I to Marco Polo II and the changes introduced by Regulation (EC) No 923/2009 noted above, there have been some additional significant changes in the structure of the Marco Polo programme. For example, management of the Marco Polo programme was transferred from DG MOVE to EACI during 2008 and the impact of this externalisation will be one aspect of our evaluation of the Marco Polo programme. Secondly, from the 2009 call there has been a doubling of the funding intensity for projects. Previously, those running projects had been funded at a rate of €1 per 500tkm achieved or 25 vehiclekilometres (vkm) avoided. This was doubled for the 2009 call onwards to €2 per 500tkm / 25vkm.

Structure of the Report

2.22 This is the final report for the ex-post evaluation of the Marco Polo I programme and interim evaluation of the Marco Polo II programme. The report is structured as follows:

(a) Section 3 presents our research methodology;

(b) Section 4 presents the evaluation results;

(c) Section 5 presents our conclusions and recommendations;

(d) Appendix 1 contains the survey questionnaires;

(e) Appendix 2 contains the interview templates;

(f) Appendix 3 presents an analysis of survey responses; and


\textsuperscript{17} Regulation (EC) No 923/2009 of the European Parliament and of the Council, OJ L 266/2, 9/10/2009, Article 1(2)

(g) Appendix 4 provides information on each of the specific issues noted in Article 14 of Regulation (EC) 923/2009.
3 RESEARCH METHODOLOGY

3.1 In this section of the report, we present details of the methodology that was followed so as to evaluate the Marco Polo programme. The outputs of our research, the evaluation results, are presented in the next section.

Analysis of Information Provided by EACI and DG MOVE

3.2 EACI provided sufficient information to allow a quantitative assessment of the efficiency and effectiveness of the Marco Polo programme at both project and programme level. The data also permitted an assessment of environmental benefits at both project and programme level and estimates of untapped potential of the programme to be compiled. In particular, we were provided with the Marco Polo monthly monitoring table and the Operational Table of Results of projects funded under Marco Polo I and Marco Polo II.

Monthly monitoring tables

3.3 For each project funded under the Marco Polo programme the monthly monitoring tables provide a description of the project, the type of action, project start and end dates, lead partner and any comments of the project’s task manager.

3.4 Quantitative information provided in the tables that will provide important inputs to the Marco Polo programme evaluation include:

(a) total project budget (€);

(b) EC contribution to project (€);

(c) achieved modal shift or traffic avoidance (tkm and/or percentage of forecast);

(d) payments made to date (€); and

(e) achieved environmental benefits (€ and/or percentage of forecast).

Operational tables

3.5 The operational tables contain information on all projects funded under the Marco Polo programme that had a modal shift objective and hence Common Learning Actions are excluded from these tables.

3.6 In addition to descriptive information such as the project name, type of action and contract period the tables provide quantitative information on:

(a) foreseen modal shift (tkm) for the project as a whole (but not year by year for all projects);

(b) achieved modal shift to date (tkm);
Research Methodology

3.7 The data are complete for the analysis based on modal shift but are of less good quality for an analysis based on environmental benefits. We understand that there are two problems with the environmental data:

(a) the ‘calculator’ is outdated and hence does not reflect the actual emissions of different types of transport currently used in projects funded under the Marco Polo programme; and

(b) data on achieved environmental benefits are not available for some projects because:

- the data are not directly accessible by EACI, due to the fact that those projects were part of the closed files inherited from DG MOVE in 2008 (eight per cent for Marco Polo I); or

- the data have not yet been made available by the beneficiaries during the intermediate reporting since these data are only compulsory at the end of the contractual term after validation by EACI in the final report with the final results of the Marco Polo calculator. This is currently the case for many Marco Polo II projects.

3.8 There was little that Europe Economics could do within the scope of this project to improve the quality of these environmental benefit data for the purpose of evaluating the Marco Polo programme. We understand that the environmental emissions calculator contains specific emissions values for each vehicle used in projects and it would not be prudent for Europe Economics to use non-specific transport emissions factors to estimate the environmental benefits based on achieved modal shift.

3.9 Where environmental achievement data are unavailable for a project, an approximation may be made to allow a fuller analysis of the success of the Marco Polo programme in achieving environmental objectives. Indeed, operational data show that the percentage achievement of environmental benefits is very closely correlated with the percentage achievement of modal shift where both figures are available.

3.10 Therefore, for the purposes of the evaluation of the Marco Polo programme, it was considered appropriate to assume that the achievement of environmental benefits corresponds exactly to the achievement of modal shift where data are not available.

Geospatial analysis

3.11 Following the provision of confidentiality agreements to DG MOVE and confirmation that DG MOVE sees some added value in geospatial analysis, Europe Economics has shared the relevant operational data with Zubed Geospatial. We produced a bespoke dataset for
Zubed, based on the raw data provided by EACI, contained in a password protected Excel file. The dataset provided to Zubed contained the following columns:

<table>
<thead>
<tr>
<th>Year</th>
<th>Call</th>
<th>Acronym</th>
<th>Description</th>
<th>Action</th>
<th>Mode</th>
<th>EC Contribution</th>
<th>Foreseen tKm</th>
<th>Achieved tKm</th>
<th>tkm (% achieved)</th>
<th>tkm/euro contribution</th>
</tr>
</thead>
</table>

3.12 Marco Polo programme data on modal shift are collected for the project as a whole and hence, while it was not possible to produce a heatmap showing differences in the success rate of projects along the route, it has been possible to produce a dynamic map. The dynamic map is a visual representation of the success of Marco Polo projects under different selection criteria (e.g. year, mode, etc) and an analysis of the map is presented later in this report.

Common learning action reports

3.13 Common learning projects cannot be evaluated using the same metrics (modal shift and environmental benefits). To enable us to assess the effectiveness of such projects EACI provided the final approval reports, where available. In such cases, the assessment of effectiveness was based on the specified objectives of the project and the extent to which these objectives have been achieved.

Selected other documents provided by DG MOVE and EACI

Previous Evaluations of the Marco Polo Programme

3.14 Two evaluations of the Marco Polo programme have previously been undertaken by ECORYS. The first of these was an ex-post evaluation of Marco Polo I and the second was an ex-ante evaluation of MP II.

3.15 These documents provided useful guidance in designing the questionnaires and interview templates. Both evaluations also provide useful insights into programme management under DG TREN and this fed into our assessment of the impact of shifting management of the programme to EACI.

Gellis Communications study

3.16 In 2009, Gellis Communications was contracted by EACI to undertake an evaluation of the communication activities of the Marco Polo Programme. Gellis states that the main objective of the study was to

"evaluate the relevance, effectiveness and impact of MP’s marketing communication activities, and develop a marketing communication plan that will assist the EACI with the\n\n\nwww.europe-economics.com\n27
development of persuasive marketing content, boost MP’s visibility amongst stakeholders, and empower stakeholders.”

3.17 Gellis also undertook an evaluation of the perception of Marco Polo’s impact upon business, the perception of Marco Polo’s overall impact on society at large, the perception of Marco Polo’s organisation and procedures at programme level. Also, the Market Segmentation report:

(a) assessed the level of change-readiness in the transport sector;
(b) assessed the level of awareness of the Marco Polo Programme;
(c) mapped the most commonly used information sources in the sector;
(d) assessed what influences sectoral decision makers; and
(e) appraised opportunities for Marco Polo amongst the sector.

3.18 Following the recommendations from the steering committee we included the relevant results of the Gellis study in our analysis.

Information on other funding programmes

3.19 One of the tasks of the Marco Polo programme evaluation is to evaluate the interaction of the programme with other funding programmes at national and European level. For assessment of possible synergies with other EU-level based programmes, DG MOVE has provided information on the Competitiveness and Innovation (CIP), FP7 and Trans-European Transport Network (TEN-T) programmes. In addition, we are aware of three national programmes that provide funds to road transport operators to shift their cargo onto ships: the French Ecomer scheme, the Italian Ecobonus systems and a similar scheme that is operational in the Spanish Basque region. DG MOVE has provided Europe Economics with documents on the Ecomer and Italian Ecobonus schemes and these fed into our analysis of the interaction of Marco Polo with other funding sources.

Additional Information Gathering

3.20 Having reviewed the information that had already been collected by DG MOVE and EACI we considered that there was quite some data and information that should be gathered to allow a full evaluation of the Marco Polo programme. The necessary information includes:

(a) data on international road freight transport;

(b) perspectives of beneficiaries on the management of the Marco Polo programme;

(c) information on the legacy of projects financed under the programme;20 and

(d) qualitative aspects of the effectiveness and efficiency of projects, especially where objectives are more than simply modal shift.

Data collection methodology and approach

3.21 To fill the remaining data gaps we carried out a survey and interview programme.

Interview with TEN-T programme official

3.22 One of the tasks in the Marco Polo programme evaluation is to compare the management of the programme under EACI with the management of the TEN-T programme by the Trans-European Transport Network Agency. In part, this assessment has been conducted on the basis of desk research as details of the management of Marco Polo under EACI are available from the Marco Polo Internal Vademecum and information on the management of TEN-T is available from the programme website.

3.23 We also interviewed an official from the Trans-European Transport Network Executive Agency (TEN-T EA) to gain a deeper insight into the procedures and processes involved in each of the programmes.

Stakeholder survey

3.24 Gellis Communications undertook a large scale survey of Marco Polo programme beneficiaries in 2009 and provided substantial information on the overall stakeholder awareness and perception of the programme. As we did not wish to replicate any of the findings of the study our survey focussed on more specific aspects of the success and management of the programme.

3.25 The survey consisted of a relatively small number of short closed questions that did not take participants too long to answer. The aim of the survey was to secure a large number of responses. Some of the issues mentioned in the survey were covered in more detail during stakeholder interviews.

3.26 We chose to survey three types of stakeholders: organisations that have participated in the programme; organisations that were unsuccessful in their proposals; and organisations that did not participate in the programme but may have considered participating in it.

20 In this context, “legacy” refers to whether or not the project remains operational in some form following the end of the period in which funding is received under the Marco Polo programme.
The survey was hosted on the Survey Methods website to conduct an online survey, which we hoped would reduce costs and increase the response rate. Europe Economics circulated an email to stakeholders containing a link to the survey. Stakeholders would click on the link and complete the survey online. Once the survey had closed, the results were downloaded from the Survey Methods website into Microsoft Excel and hence could be immediately analysed.

Of 1,496 individuals contacted, we received 79 responses to the survey (though it should be noted that we contacted several individuals in some organisations and hence the number of organisations contacted is somewhat less than the number of individuals). The respondents comprised: 2 successful applicants under Marco Polo I only; 5 successful applicants both Marco Polo I and II; 29 successful applicants under Marco Polo II; 12 unsuccessful applicants; and 31 companies that did not apply for either Marco Polo program. Between 2003 and 2009, 125 projects involving more than 500 companies received funding from the Marco Polo programme and it is hence clear that only a small proportion of recipients responded to the survey. As a result, conclusions that are drawn from survey responses should be treated with care.

The detailed survey questions are presented in Appendix 1 of this document.

All survey respondents were candidates for participation in the structured interview programme and a sample was selected from this population. As far as possible, we ensured that the sample of projects for interview is reasonably representative in terms of size of project (funding provided), type of action and geographical location given the characteristics of survey respondents.

Given the relatively short timeframe of the project we conducted these interviews over the telephone. We held a total of 20 structured interviews: 5 for participants of Marco Polo I, 9 for participants of Marco Polo II, 3 for unsuccessful applicants for funding under Marco Polo II and 3 for other stakeholders.

The structured interviews had the following objectives:

(a) to gather qualitative information, with particular regard to the reasons for seeking funding (or not), the perception of the programme in general and specific points concerning the perception of operation and management of the programme; and

(b) to elaborate, where appropriate, the responses received from specific respondents to the survey.

In designing the interview templates we have been mindful of the work that has been undertaken by Gellis Communications and Ecorys. Detailed interview templates are presented in Appendix 2 of this document.
Contacts for surveys and interviews

3.34 The aim of the survey is to gather responses from as many stakeholders as possible and hence we sent the survey by email to each of the 1,200 organisations listed in the stakeholder database compiled as part of the Gellis study. Additional contacts are provided in the contact list for the market segmentation study, although only a proportion of these contacts are relevant for our purposes. We conducted a cross-check with a list of contacts for all recipients of funding under the MP II programme provided by EACI to ensure that all recipients have been included.

Evaluation Framework

3.35 This section of the report has so far described:

(a) the data available from DG MOVE and EACI;

(b) the additional data requirements;

(c) our data collection methodology and approach; and

(d) contacts for surveys and interviews

3.36 We now draw together the prior discussion and illustrate the information that has been used to inform each aspect of the evaluation of the Marco Polo programme. We specify the indicators that are used to measure the success of each aspect of the programme and the source of that information, at both project and programme level.
The structure of the programme level evaluation is presented in the table below.
### Programme level

<table>
<thead>
<tr>
<th>Concept</th>
<th>Indicator</th>
<th>Source</th>
<th>Survey Questions (*)</th>
<th>Beneficiary Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>Statements</td>
<td>DG MOVE and EACI documents</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Take-up</td>
<td>Use of available budget</td>
<td>EACI data</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Call and selection</td>
<td>Descriptive</td>
<td>EACI Internal Vademecum document</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td>Interview with EACI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of consultants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coverage (geo, size)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Planned / achieved modal shift</td>
<td>EACI data</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Other qualitative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Achieved modal shift / expenditure</td>
<td>EACI data</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Committed / realised budget</td>
<td>Interview with EACI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other qualitative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Carbon emissions</td>
<td>EACI data</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Calculator</td>
<td>Interview with EACI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other qualitative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Economic activity</td>
<td>Gellis report</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Jobs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Traffic congestion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market conditions</td>
<td>Cooperation</td>
<td>ECORYS reports</td>
<td>N/A</td>
<td>Q8-11</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competition</td>
<td>Interview with EACI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legacy</td>
<td>Did/will it end with end of MP funding?</td>
<td>Survey and interviews</td>
<td>Q19-20 (A)</td>
<td>Q12-13</td>
</tr>
<tr>
<td></td>
<td>Influencing factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>Qualitative assessment of auditing process</td>
<td>Interview with EACI</td>
<td>Q8-14 (A)</td>
<td>Q14-21</td>
</tr>
<tr>
<td></td>
<td>Change to agency</td>
<td>Survey and Interviews</td>
<td>Q2-5(U)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gellis report</td>
<td>Q4-5 (N)</td>
<td></td>
</tr>
<tr>
<td>Displacement, Synergies</td>
<td>Would project have happened without Marco Polo funding?</td>
<td>Survey</td>
<td>Q5-7 (A)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Q7,9,10 (U)</td>
<td></td>
</tr>
<tr>
<td>Interaction with other funding programmes</td>
<td>Complementarity of overlaps with other EU or national programmes</td>
<td>Documents provided by DG MOVE and EACI/desk research</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Impact of Regulation EC No 923/2009</td>
<td>Participation Impact</td>
<td>Survey and interviews</td>
<td>Q27 (A)</td>
<td>Q24-25</td>
</tr>
</tbody>
</table>

(*) Note: (A)= Successful applicants’ survey; (U)=Unsuccessful applicants survey; (N)=Non-applicants’ survey.
4 EVALUATION RESULTS

4.1 The evaluation results, based on the methodology described above, are presented in this section, structured as follows:

(a) analysis at programme level;
(b) analysis at project level;
(c) geospatial analysis;
(d) management evaluation; and
(e) synergies between Marco Polo and other programmes.

Analysis at Programme Level

4.2 EACI has provided Europe Economics with the Marco Polo monthly monitoring table and the Operational Table of Results of projects funded under Marco Polo I and Marco Polo II. These tables provide sufficient information to allow a quantitative assessment of the efficiency and effectiveness of the Marco Polo programme at programme level.

4.3 Within this section we also present an analysis of aspects of the Marco Polo programme such as its legacy, competition effects, the untapped potential of the programme and the factors that influence the success or failure of projects.

Effectiveness

4.4 The assessment of effectiveness of the policy must be related directly to the specific objectives of the project. This assessment is relatively straightforward for modal shift actions because it is most appropriate to assess effectiveness in terms of comparing the millions of tonne-kilometres expected (or planned in the projects) and shifted off the road (or achieved) as a result of the project. For such assessments, we use data provided by EACI to conduct the analysis. The same approach is used for assessing the effectiveness of ‘motorways of the sea’ and traffic avoidance actions.

4.5 Effectiveness is more difficult to assess for catalyst actions and common learning actions. Catalyst actions generally aim to have a direct impact on the levels of international road transport but have additional objectives that should be included in the assessment of project effectiveness. Common learning actions do not have a direct modal shift objective and hence cannot be assessed on the basis of transport shifted off the road. In such cases the effectiveness analysis is based on internal final approval reports provided by EACI.

4.6 While it would be ideal to measure the effectiveness of projects by the real impact of the common learning action on logistics companies, such information is not consistently collected. Given that projects are paid on the basis of the achievement of specific
objectives rather than on the impact of the project on the market, the non-availability of data on real impact is not surprising. Indeed, quantifying the real impact would be a challenging task and is not one that has been attempted at mid-December 2010. Therefore, our assessment of effectiveness relies on the same metrics as are used by EACI to judge the success of projects. Nonetheless, where qualitative information of the real impact of projects is available it has been included.

4.7 At this point, it should be noted that general market conditions may have had an adverse impact on the success rate of projects financed in the final year of Marco Polo I and under Marco Polo II. Indeed, a decrease in freight transport volumes (especially in 2007-2008, see Figure 2.1) and fall in the relative cost of road transport would have a combined effect of making the achievement of modal shift forecasts more difficult. The results of this section should be seen in the context of this relatively difficult climate for Marco Polo projects.

Actions with a modal shift objective

4.8 This section considers actions that had a modal shift objective: modal shift actions, catalyst actions, motorways of the sea actions and traffic avoidance actions. The measure of effectiveness is provided by comparing the achieved and expected tonne kilometres of the different projects. We note that the latter three actions have additional objectives over and above modal shift and hence assessments of effectiveness based on modal shift are a lower bound for such actions.

4.9 Table 4.1 shows the total modal shift that was expected and achieved for each year of call in Marco Polo I. As all but two of the Marco Polo I projects are either closed or stopped and a realistic projection has been made for the two remaining final projects, these figures provide an accurate representation of the success of projects financed under the first Marco Polo programme. It is evident that there is significant underachievement of anticipated modal shift in all years of Marco Polo I, and that the underachievement was significantly greater in 2006 than in previous years. This point is explored in greater detail below.

<table>
<thead>
<tr>
<th>Table 4.1: Marco Polo I — total modal shift by call (Mtkm and %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Expected</td>
</tr>
<tr>
<td>Achieved</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

Source: EACI data

4.10 Table 4.2 shows the total modal shift that was expected and achieved for each year of call in Marco Polo II. It should be emphasised that this figure will increase over time for the call years of 2007-2009 as many of these projects are still ongoing and hence the final percentage of expected modal shift that will be achieved will be greater than the figures presented in the table.
Table 4.2: Marco Polo II — total modal shift at mid-December 2010 by call (Mtkm and %)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>27,835</td>
<td>16,334</td>
<td>17,177</td>
<td>61,285</td>
</tr>
<tr>
<td>Achieved at mid-December 2010</td>
<td>6,562</td>
<td>1,703</td>
<td>380</td>
<td>8,645</td>
</tr>
<tr>
<td>% at mid-December 2010</td>
<td>23.58</td>
<td>10.43</td>
<td>2.22</td>
<td>14.11</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: *Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.
Figures for traffic avoidance actions are the tonnekilometre equivalent of vehiclekilometres.

4.11 As noted above, one problem with the figures in Table 4.2 is that many of the projects for 2007 to 2009 are ongoing and the figures are likely to increase over time, as the programmes approach their end. Indeed, we are aware that it is normal for projects to achieve low levels of modal shift in the early years of the project and that the annual achievement increases over time. However, our analysis has shown that while the planned achievement of modal shift increases over time, there is little consistency in the anticipated annual planned modal shift between projects, even for the same action type.

4.12 While it is possible that the performance of ongoing projects may increase over time it is also possible that the declining success rate of projects reflects other factors that have evolved during the lifetime of the Marco Polo programme. For example, we are aware that there is a concern that applicants are persuaded by consultants engaged in the application process to put down a level of expected modal shift that exceeds the true potential of the project in order to increase the likelihood of securing funding under the Marco Polo programme (based on the current automatic scoring system applied as a part of the evaluation process).

4.13 If this concern is valid, it would explain why the observed success rate has been declining over time: it would not be due to the performance of projects per se but instead the result of overstatements of expected modal shift in funding applications. Further, this may explain the significant drop in achievement in 2006 — by this date there would have been sufficient experience with the programme for these issues to become evident. Noticeably, in many cases the difference between the expected and achieved amount is such that the final modal shift achieved would be below the threshold of acceptance in the proposal evaluation phase.

4.14 Table 4.3 shows the total modal shift that was achieved by type of action for Marco Polo I while Table 4.4 shows the total modal shift achieved / traffic avoided at mid-December 2010 under Marco Polo II. It is clear that the vast majority of actions funded so far under the Marco Polo programme have been modal shift actions and, hence, the bulk of the modal shift achieved as a result of the programme is accounted for by modal shift actions. The tables also show that the average modal shift achieved by a project is greatest for catalyst actions under Marco Polo I and Motorways of the Sea actions under Marco Polo II at mid-December 2010.
### Table 4.3: Marco Polo I — total modal shift by type of action

<table>
<thead>
<tr>
<th></th>
<th>MOD</th>
<th>CAT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marco Polo I</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of actions</td>
<td>44</td>
<td>5</td>
<td>49</td>
</tr>
<tr>
<td>Modal shift achieved (Mtkm)</td>
<td>19,098</td>
<td>2,365</td>
<td>21,462</td>
</tr>
<tr>
<td>Average modal shift per action (Mtkm)</td>
<td>434</td>
<td>473</td>
<td>438</td>
</tr>
</tbody>
</table>

Source: EACI data

### Table 4.4: Marco Polo II — total modal shift / traffic avoidance at mid-December 2010 by type of action

<table>
<thead>
<tr>
<th></th>
<th>MOD</th>
<th>CAT</th>
<th>MoS</th>
<th>TAV&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marco Polo II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of actions</td>
<td>55</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>Modal shift/traffic avoidance achieved at mid-December 2010 (Mtkm)</td>
<td>7,812</td>
<td>124</td>
<td>680</td>
<td>29</td>
<td>8,645</td>
</tr>
<tr>
<td>Average modal shift per action (Mtkm)</td>
<td>142</td>
<td>25</td>
<td>340</td>
<td>14.5</td>
<td>133</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: <sup>a</sup> Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

4.15 It should be noted that traffic avoidance actions are different in concept to the other action types presented in Table 4.4, although the planned traffic mitigation is in line with other action types such as modal shift actions. Examples of these actions would be cutting the journey distance, increasing loads or reducing the number of empty runs.<sup>21</sup>

4.16 Their lower average achievement (when converted to modal shift equivalent terms of tkm rather than vkm) may be because this type of action goes beyond shifting freight off the roads as they make the supply chain more efficient by integrating transport into the production process. However, a significant part of the explanation is that the projects have only recently begun and hence an increasing success is expected over time. Additional explanations might include an adverse the impact of the economic crisis and an overestimation of the potential achievement of the actions, by the applicant, at the application stage.

4.17 Figure 4.1 shows the percentage of forecast modal shift that has been achieved at mid-December 2010 for each Marco Polo programme by type of action. As above, the Marco Polo II figures are expected to increase significantly over time as many projects are still ongoing.

<sup>21</sup> The relevant metric for evaluating traffic avoidance actions is also different: vehicle kilometres rather than the tonnekilometres that are used for other action types, as indicated in the table.
Figure 4.1: Modal shift by type of action and year (% and number of projects)

Source: EACI data
Note: * Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

4.18 Figure 4.2 shows the average success rate of projects, measured as the percentage of foreseen modal shift that has been achieved, by transport mode. Again, the Marco Polo II figures are expected to increase significantly over time as many projects are still ongoing.

Figure 4.2: Modal shift by transport mode (% and number of projects)

Source: EACI data
Note: * Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

Catalyst actions

4.19 Catalyst actions, in addition to the modal shift objective, aim to overcome one or more structural barriers. The structural barriers are specific to each project and hence it is not possible to provide a quantitative assessment of success in overcoming such barriers on a consistent basis. However, a qualitative assessment is possible and an inconsistent picture emerges. Two contracts were terminated before a service could begin and hence structural barriers were not overcome while a third contract was terminated with limited success in overcoming the structural barriers identified.
Evaluation Results

4.20 Nonetheless, the majority of catalyst actions have been relatively successful in overcoming the identified structural barriers. Some projects have successfully overcome psychological barriers to intermodal transport while others have successfully overcome technical difficulties that existed prior to the award of Marco Polo funding. While some projects overcome only a subset of all barriers identified, the general picture is positive: catalyst actions for which the proposed service has become operational have typically succeeded in overcoming the identified structural barriers.

4.21 This implies that the effectiveness estimate for catalyst actions presented in the tables above (and hence based on the modal shift objective alone) is probably an underestimate of the true effectiveness of the actions. However, it is not possible to quantify the impact of overcoming a structural barrier in monetary terms and hence this point must be treated qualitatively.

Common learning actions

4.22 An assessment of the effectiveness of the Marco Polo programme for common learning actions must be undertaken project by project because the objectives of each action are so different that there is no common basis on which to conduct the assessment. In particular, common learning actions do not have a modal shift objective and hence analysis needs to be based on project features such as whether the forecast number of lectures took place, whether the forecast number of attendees was achieved and so on. Having conducted such a project-by-project analysis, it is possible to draw conclusions by comparing and contrasting the individual project analyses.

4.23 It is worth noting at the outset that there are some challenges in basing an analysis of the effectiveness of common learning actions on project features such as those described above. In particular, the assessment of project success cannot take into account a measure of quality and hence there is an incentive problem for those running projects. The quality of the actions clearly affects the overall added value of Marco Polo funding, but there is little incentive for the applicant to produce projects that are high quality. It should be noted that the EACI is currently preparing an updated Annex to the grant agreement for common learning actions in order to better define the milestones used for payments as well as introducing some qualitative parameters allowing adjustments of the final payments.

4.24 It is on the basis of the internal final approval reports (or, in two cases, the “fiche de transfert” — post-project transfer form — between DG MOVE and EACI) that the assessment of the effectiveness of common learning actions is based. Projects awarded funding in the 2008 call have not been included in the analysis as these actions are ongoing and a final approval report is not available at present.

4.25 Based on the analysis of individual projects, common themes can be drawn at programme level. Indeed, it is clear that common learning actions have been relatively successful in achieving their stated objectives, with a number of projects having a success rate of 100 per cent.
4.26 There is a difference, however, between achieving the stated objectives and whether the project has a real qualitative and quantitative impact on the practices of logistics companies and on the future growth in intermodal transport, and the evidence in favour of this point is less clear. For example, the approved final report for the one action questioned the impact of such an initiative on industrial practices and hence some common learning actions seem to have limited added value for the market.

Success and failure factors

4.27 Respondents to the beneficiaries’ survey provided information on what they consider to be the main factors contributing to the success / failure of the project. The detailed results are presented in Table 4.5 below.

4.28 It is interesting to note that the two most commonly cited negative factors (worse economic conditions and lower demand) can be, at least partially, attributed to the overall downturn of the economy and hence the recent economic crisis seems to be an important factor that contributed to the failure of some of the projects.

4.29 On the other hand, the projects helped to implement and generate innovative ideas which contributed to the success of these projects. Increased publicity and credibility related to the Marco Polo funding seemed to have an important positive impact as well.
Evaluation Results

Table 4.5: Project success and failure factors (number of responses)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Low importance</th>
<th>Medium importance</th>
<th>High importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic conditions hindered project</td>
<td>7</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Project lead to the implementation of innovative ideas</td>
<td>4</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Project lead to the generation of innovative ideas</td>
<td>3</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Lower demand than anticipated</td>
<td>5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Marco Polo funding gave credibility to project</td>
<td>5</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Marco Polo funding increased publicity of the project</td>
<td>10</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Defensive reaction from road haulage firms in lowering prices</td>
<td>12</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Project lead to an increased sharing of knowledge</td>
<td>11</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Difficulty convincing clients to switch to an alternate mode of transport</td>
<td>5</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Marco Polo funding encouraged increased cooperation between firms</td>
<td>11</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Administrative and reporting requirements</td>
<td>11</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Economic conditions helped project</td>
<td>18</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Higher demand than anticipated</td>
<td>12</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Legal difficulties</td>
<td>18</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Action by other entities to improve infrastructure in reaction to the project</td>
<td>21</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Project was unable to overcome structural barriers</td>
<td>15</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Efficiency

4.30 A standard indicator used to measuring the efficiency of a project is the ratio of outputs to inputs. (a greater ratio implies that the project had greater efficiency). The 'output' of the project can be measured by the number of billion tonne-kilometres of international road transport shifted off or avoided from the road. The advantage of this metric is that it is relatively simple to estimate for each project and comparison across projects provides a direct measure of the efficiency of the different projects. As this information has been provided by EACI, it is possible to obtain good efficiency estimates for projects that were allocated funding because of a modal shift action or motorway of the seas action.

4.31 As was the case for assessment of effectiveness, assessing catalyst actions and common learning actions is more complex because at least part of the objectives of these actions cannot be measured in terms of billions of tonne-kilometres saved.

4.32 While catalyst actions should lead to the lifting of a structural barrier and thereby have a lasting impact on the market, it is not possible to quantify the impact given that no common data are available on this point. However, it is possible to estimate a lower bound to efficiency by calculating the ratio of modal shift impacts to total cost of the project and it is on this basis that the figures are presented in the tables below.
4.33 While common learning actions should also have a lasting impact on the market, it was noted in the effectiveness analysis that while the evidence available on this point is limited, some suggests that the real impact of some common learning actions is limited. As there is no single objective against which the ‘efficiency’ of common learning actions can be measured, an assessment of the efficiency of common learning actions is not presented. The conclusions are equivalent to those presented in the effectiveness section above.

Actions with a modal shift or traffic avoidance objective

4.34 This section considers actions that had a modal shift or traffic avoidance objective: modal shift actions, motorways of the sea actions, traffic avoidance actions and catalyst actions. We note that catalyst actions have additional objectives over and above modal shift and hence assessments of efficiency based on modal shift are a lower bound for such actions.

4.35 The statistics presented in the tables below exclude projects where either of the following statistics are not available:

(a) EC contribution to project budget; or
(b) achieved modal shift / traffic avoided.

4.36 Table 4.6 shows the efficiency of modal shift actions under Marco Polo I. The table suggests that the efficiency of funds allocated under the Marco Polo programme has varied from year to year. It is important to emphasise that the figures presented in this table are based on the committed financial means and not the payments actually made to projects.

Table 4.6: Marco Polo I — efficiency by call (committed funds, modal shift actions only)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>573</td>
<td>307</td>
<td>252</td>
<td>212</td>
<td>326</td>
</tr>
</tbody>
</table>

Source: EACI data

4.37 Table 4.7 shows the efficiency at mid-December 2010 of modal shift actions under Marco Polo II while Table 4.8 shows the efficiency based on all action types other than catalyst actions and common learning actions that were awarded funding under Marco Polo II. It is again important to emphasise that the figures presented in these tables are based on the committed financial means and not the payments actually made to projects.

4.38 At first sight, the efficiency of Marco Polo II projects appears to be lower than Marco Polo I projects. However, as many Marco Polo II projects are ongoing, the efficiency figures will inevitably increase over time as additional freight is shifted off the road or additional traffic is avoided. Indeed, as projects tend to achieve greater modal shift towards the end of the funding period, it is likely that these efficiency figures will increase significantly. In addition
to this, some projects do not begin at the start of the funding year and hence in such cases, the achievement in the first year would be low.

Table 4.7: Marco Polo II — efficiency at mid-December 2010 by call (committed funds, modal shift actions only)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>648</td>
<td>538</td>
<td>299</td>
<td>468</td>
</tr>
<tr>
<td>Efficiency achieved at mid-December 2010 (tkm / €)</td>
<td>224</td>
<td>83</td>
<td>23</td>
<td>128</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: * Figures for Marco Polo II relate to projects that are currently still ongoing and it is likely that such figures increase over time

Note: From call 2009, beneficiaries are reimbursed at a rate of €2 / 500tkm modal shift rather than at a rate of €1 / 500tkm as for calls 2003-2008. Hence, expected efficiency figures for 2009 are far lower than in previous years.

Table 4.8: Marco Polo II — efficiency at mid-December 2010 by call (committed funds, projects other than catalyst actions and common learning actions)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>761</td>
<td>538</td>
<td>288</td>
<td>486</td>
</tr>
<tr>
<td>Efficiency achieved at mid-December 2010 (tkm / €)</td>
<td>210</td>
<td>83</td>
<td>23</td>
<td>127</td>
</tr>
</tbody>
</table>

Source: EACI data (four projects are included in the table: two Motorways of the Sea actions and two traffic avoidance actions)

Note: * Figures for Marco Polo II relate to projects that are currently still ongoing and it is likely that such figures increase over time.

Note: From call 2009, beneficiaries are reimbursed at a rate of €2 / 500tkm modal shift rather than at a rate of €1 / 500tkm as for calls 2003-2008. Hence, expected efficiency figures for 2009 are far lower than in previous years.

4.39 Table 4.9 shows the project efficiency based on funds actually paid to beneficiaries under Marco Polo I. Figures are not available for Marco Polo II at present as these projects are ongoing and hence final payments to beneficiaries have not yet been determined.

4.40 There is a crucial distinction between these figures and those presented above based on committed funds. Indeed, beneficiaries were reimbursed at a rate of €1 per 500tkm modal shift achieved from the 2003 to 2008 calls and at a rate of €2 per 500tkm from the 2009 call onwards. Hence, beneficiaries are reimbursed on the basis of project results. It should be noted, however, that these rules do not apply to catalyst actions and common learning actions and hence these actions are excluded from the table.

4.41 If all projects achieved 100 per cent of the forecast modal shift, the efficiency figures based on committed funds and paid funds would be the same. However, as noted above, almost all projects have achieved a lower than forecast modal shift and hence the efficiency of projects measured through paid funds will be greater than efficiency figures estimated on the basis of committed funds. This is clearly illustrated by comparing Table 4.9 with Table 4.6.
### Table 4.9: Marco Polo I — efficiency by call (paid funds, modal shift actions)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved</td>
<td>918</td>
<td>595</td>
<td>672</td>
<td>501</td>
<td>679</td>
</tr>
</tbody>
</table>

Source: EACI data

4.42 The fact that the efficiency of projects financed under the Marco Polo programme is greater when estimates are based on paid funds rather than committed funds would suggest that there would be an overall social gain if it were possible to provide funding in stages rather than committing all project funds at the signature of the Grant Agreement. This is because European funds would not be committed and inaccessible for several years even if a project has failed but could instead be distributed to productive projects on an annual basis. As those running projects would still be paid on the basis of results there would be no change in the incentive structure for beneficiaries but there would be a beneficial reduction in the opportunity cost of European funds.

4.43 Figure 4.3 shows the efficiency of projects at mid-December 2010 by call and action. It is evident that modal shift projects typically achieve the greatest tonnekilometre shift per euro of EC funding. This is somewhat unsurprising given that modal shift is the sole objective of these projects whereas other action types have additional aims that cannot be reflected in a statistic of project efficiency. Therefore, the efficiency estimates for other action types should be seen as a lower bound since the achievement of other objectives that cannot be incorporated into a quantitative assessment would presumably result in the project being perceived as more efficient than suggested in Figure 4.3.
**Evaluation Results**

**Figure 4.3: Achieved efficiency at mid-December 2010 — committed funds, by call and action (tkm per € and number)**

![Graph showing achieved efficiency for Marco Polo I and Marco Polo II](image)

Source: EACI data

Note: * Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

Note: From call 2009, beneficiaries are reimbursed at a rate of €2/500tkm modal shift rather than at a rate of €1/500tkm as for calls 2003-2008. Hence, expected efficiency figures for 2009 are far lower than in previous years.

**Catalyst actions**

4.44 As noted above, the standard payment rule of €1 (or €2) per 500tkm does not apply for catalyst actions and hence we have not included such actions in the tables above. Instead, we present a separate analysis of the expected and achieved efficiency of catalyst actions in this section. While it is not reasonable to compare the efficiency of catalyst actions with the efficiency of other action types it is nonetheless valuable to compare the efficiency of catalyst actions that were awarded funding in different years.

4.45 Table 4.10 shows the efficiency of catalyst actions that were awarded funding under Marco Polo I. Caution should be exercised when reviewing this table because the figures are based on only a small number of projects (1 in 2004, and 2 in each of 2005 and 2006). Nonetheless, it is interesting to note that the project financed in the 2004 call achieved an efficiency value that was very close to that expected. Projects in 2005 and 2006 were less successful in achieving the expected efficiency.

**Table 4.10: Marco Polo I — efficiency by call (committed funds, catalyst actions only)**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>-</td>
<td>393</td>
<td>231</td>
<td>537</td>
<td>359</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>-</td>
<td>383</td>
<td>174</td>
<td>32</td>
<td>198</td>
</tr>
</tbody>
</table>

Source: EACI data

4.46 Table 4.11 shows the efficiency of catalyst actions that were awarded funding under Marco Polo II. As these projects are ongoing, the efficiency achieved figures will probably increase over time. As with the table above, caution should be exercised when reviewing...
this table because the figures are based on only a small number of projects (1 in 2008, and 2 in each of 2007 and 2009).

Table 4.11: Marco Polo II — efficiency at mid-December 2010 by call (committed funds, catalyst actions only)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected</td>
<td>107</td>
<td>165</td>
<td>88</td>
<td>108</td>
</tr>
<tr>
<td>Efficiency achieved at mid-December 2010</td>
<td>1</td>
<td>78</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Figures for Marco Polo II relate to projects that are currently still ongoing and it is likely that such figures increase over time.

Note: From call 2009, beneficiaries are reimbursed at a rate of €2/500tkm modal shift rather than at a rate of €1/500tkm as for calls 2003-2008. Hence, expected efficiency figures for 2009 are far lower than in previous years.

4.47 Table 4.12 shows the project efficiency based on funds actually paid to beneficiaries under Marco Polo I. Figures are not available for Marco Polo II at present as these projects are ongoing and hence final payments to beneficiaries have not yet been determined.

4.48 There is a crucial distinction between these figures and those presented above based on committed funds since beneficiaries are reimbursed on the basis of project results and are not paid the full amount committed to their project unless all objectives are met.

4.49 If all projects achieved 100 per cent of the objectives, the efficiency figures based on committed funds and paid funds would be the same. However, all catalyst actions have achieved less than 100 per cent and hence the efficiency of projects measured through paid funds is greater than efficiency figures estimated on the basis of committed funds. This is clearly illustrated by comparing Table 4.12 with Table 4.10.

Table 4.12: Marco Polo I — efficiency by call (paid funds, catalyst actions only)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected</td>
<td>-</td>
<td>393</td>
<td>231</td>
<td>537</td>
<td>359</td>
</tr>
<tr>
<td>Efficiency achieved</td>
<td>-</td>
<td>576</td>
<td>426</td>
<td>50</td>
<td>364</td>
</tr>
</tbody>
</table>

Source: EACI data

Environmental benefits

4.50 Applicants for funding under the Marco Polo programme are required to present in their proposals a forecast of environmental benefits that will be achieved through the project. Such estimates are formed using the Marco Polo calculator, a pre-formatted Excel spreadsheet that is available in the application packs for each call via the Marco Polo website.
The Marco Polo Calculator

4.51 The Marco Polo calculator is widely considered to be outdated and hence does not provide accurate estimates of the environmental benefits that might be achieved by each project. Indeed, in conducting an ex ante evaluation of the second Marco Polo programme ECORYS reported that the railway community fears the calculator is too favourable towards short sea shipping projects because of an overly positive calculation of the environmental impact of ships relative to road transport. It was noted in the report that when comparing modern truck engines with outdated ship engines or high-speed ship engines, the environmentally favourable option might be road transport.

4.52 In 2010, the Commission, following the latest scientific knowledge with regard to valuation of external costs, fine-tuned the coefficients and methodology used in the Marco Polo calculator. The updated version of the calculator was then peer reviewed by independent external experts. The key finding of the peer review was that while the proposed new version of the calculator is an improvement on the previous version, there remains scope for further improvement. The output of calculator was considered adequate for comparative purposes but the authors noted that it is not considered adequate to produce quantitative assessments of the externalities of a specific transport service. The calculator will, therefore, continue to present a difficulty for quantifying the real impact of programme interventions. Indeed, while it will be possible to compare the relative success of different projects in terms of the environmental objectives, it will not be possible to provide an accurate quantification of the external costs avoided through the projects.

Data availability and achieved environmental benefits

4.53 Given that forecast environmental benefits are required to be provided in proposals, the EACI internal spreadsheets provide forecast benefits for each project. Where data are not provided there are two possible explanations:

(a) the data are not directly accessible by EACI, due to the fact that those projects where part of the closed files inherited from DG MOVE in 2008; (8 per cent for Marco Polo I); or

(b) the data have not yet been made available by the beneficiaries during the intermediate reporting since these data are only compulsory at the end of the contractual term after validation by EACI in the final report with the final results of the Marco Polo calculator.

23 EACI does not use data on environmental benefits in its operational management in the life cycle of the projects and hence there is no need for EACI to collect data on achieved environmental benefits while projects are still ongoing. Nonetheless, the EACI internal spreadsheets contain information on achieved environmental benefits wherever it is readily accessible from project reports. In such cases, we can use these data to conduct a direct assessment of the achievement of environmental objectives.
Where environmental achievement data are unavailable for a project, an approximation may be made to allow a fuller analysis of the success of the Marco Polo programme in achieving environmental objectives. EACI data show that the percentage achievement of environmental benefits is very closely correlated with the percentage achievement of modal shift where both figures are available. For the purposes of the evaluation of the Marco Polo programme, we assume that the percentage achievement of environmental equals the percentage achievement of modal shift where data are not available. The analysis does not consider common learning actions since such projects do not have a direct environmental objective.

Table 4.13 shows the achievement of environmental benefits for all Marco Polo I projects for which achieved modal shift data are available. In this case, direct data on achieved environmental benefits are used where available and the statistic is proxied by the proportional achievement of modal shift where figures are not directly available. As for the modal shift analysis presented above, there was a decline during Marco Polo I in the proportion of forecast environmental benefits that were achieved. The explanations for this pattern are the same as that for the decline in modal shift achievement and hence are not repeated here.

Table 4.14 shows the achievement of environmental benefits at mid-December 2010 for all Marco Polo II projects for which achieved modal shift data are available. Again, direct data on achieved environmental benefits are used where available and the statistic is proxied by the proportional achievement of modal shift where figures are not directly available. It should be noted that these figures relate to projects that are currently still going and hence will increase over time.

Table 4.13: Marco Polo I — expected and achieved environmental benefits by year (including proxies)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected (€)</td>
<td>204.3</td>
<td>187.4</td>
<td>213.2</td>
<td>180.7</td>
<td>786</td>
</tr>
<tr>
<td>Achieved (€)</td>
<td>135.7</td>
<td>114.1</td>
<td>97.8</td>
<td>69.3</td>
<td>417</td>
</tr>
<tr>
<td>%</td>
<td>66.4</td>
<td>60.9</td>
<td>45.9</td>
<td>38.3</td>
<td>53.1</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Absolute € environmental benefits are not correct due to problems with the Marco Polo calculator. However, comparing percentage achievement is valid because both expected and achieved figures suffer the same error.
Table 4.14: Marco Polo II — expected and achieved environmental benefits by year at mid-December 2010 (including proxies)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected (€)</td>
<td>578.4</td>
<td>231.7</td>
<td>124.9</td>
<td>935</td>
</tr>
<tr>
<td>Achieved at mid-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 2010 (€)</td>
<td>132.3</td>
<td>36.6</td>
<td>8.1</td>
<td>177</td>
</tr>
<tr>
<td>%</td>
<td>22.9</td>
<td>15.8</td>
<td>6.5</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Absolute € environmental benefits are not correct due to problems with the Marco Polo calculator. However, comparing percentage achievement is valid because both expected and achieved figures suffer the same error.

Note: Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

4.57 Figure 4.4 shows the achieved environmental benefits by action based on data including proxies.

Figure 4.4: Percentage achieved environmental benefits by action (including proxies)

Source: EACI data

Note: * Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time.

Additional environmental benefits and costs

4.58 Respondents to the beneficiaries’ survey were asked to indicate whether or not any additional environmental benefits that had been generated by the project, other than those that arose as a result of modal shift, and to describe the benefits(s) if they answered in the affirmative.

4.59 The majority of those that responded to the question (20 of 33 responses) stated that their project had created additional positive environmental impacts. While some of the specified benefits appear to have arisen as a direct consequence of modal shift, some benefits clearly are additional. An important issues mentioned in survey responses included the idea that knowledge spillovers and useful contacts obtained through the Marco Polo programme will create additional positive environmental impacts in the future as they continue to work on modal shift projects. This illustrates the point that knowledge...
spillovers are not constrained to common learning actions alone but can arise in all projects as a result of collaboration between entities.

4.60 Two respondents to the beneficiaries survey stated that the Marco Polo programme had led to increased pollution of seas and waterways, a view that was also held by three of 29 respondents to the survey of those that had not applied for Marco Polo funding. Similar numbers of respondents felt that the programme had led to increased congestion on railways, seas and waterways.

Additional impacts

4.61 Respondents to the beneficiaries' survey were asked to specify whether or not the project had any impacts (positive or negative) other than modal shift and environmental benefits and, if so, to describe the relevant benefits.

4.62 The majority of respondents (23 of 32 responses) stated that the project had led to additional benefits. Important examples of such benefits are:

(a) a shift in the way of thinking about logistics and transport modes;

(b) a change in habits and encourage search for best intermodal solutions;

(c) knowledge transfers between organisations and countries; and

(d) contacts and information to continue working on rail projects.

4.63 The projects are also seen to have led to job creation. The majority of respondents that provided a response to this question (11 of 21 respondents) stated that the project had led to the creation of between one and ten jobs. Four of the 21 respondents to this question stated that the project had created zero jobs while, at the other extreme, one respondent stated that the project had created more than 50 jobs. We consider that this will most likely be an inflated estimate as it included seafarers that work onboard the vessels which it is quite possible would have been productively employed even in the absence of the programme. In other words, the respondent reported the gross number of people in employment on the project rather than the net number of jobs created.

4.64 There are a number of problems with the estimates of job creation presented above, however:

(a) we have seen figures for only 21 responses to the survey and hence it has not been possible to quantify the employment impact of many projects;

(b) some respondents have probably overstated the true impact of the project in terms of job creation by reporting the total gross number of people employed rather than the net number of jobs created (i.e. the number that would not have been otherwise employed);
(c) there may be some deadweight effect of the projects where they would have gone ahead in the absence of Marco Polo funding — in such cases, the net impact of the Marco Polo programme is zero.

4.65 It should be also noted that additional jobs could have been created indirectly in other participating companies and these are not included. Equally, however, there may have been job losses in other industries as employment was displaced away from the road haulage industry towards the modally shifted industries, but we have been unable to quantify these.

Contribution and legacy of the programme

4.66 The vast majority of respondents to Question 5 of the beneficiaries survey (31 of 33 responses) stated that the idea for the project for which funding was received existed before considering applying for the Marco Polo programme. The programme was stated to have driven the development of two projects, one of which was a modal shift action and the other of which was a catalyst action, both financed under Marco Polo I. This would indicate that Marco Polo has not led to an increase in innovative behaviour in the transport sector because transport companies were developing innovative solutions even in the absence of the programme. Nonetheless, the programme may still play an important role in ensuring that some of these projects go ahead.

4.67 More than a half of the 33 respondents to Question 6 of the beneficiaries’ survey stated that the projects would, or may, have been initiated even without funding from the Marco Polo programme and forty two per cent stated that the projects would definitely have gone ahead in the absence of Marco Polo funds. This proportion may seem rather high and would indicate that the Marco Polo programme only adds value in a minority of cases. As one respondent suggested, this observation may be explained by the fact that the grant received from the Marco Polo programme must be returned if the project fails. Therefore, it is suggested that only projects that could work without a grant participated in the programme.

4.68 However, it is quite possible that the start-up aid provided through the Marco Polo programme helped some projects to reach the break-even point earlier than would have been possible without funding. It is also possible that a larger scale of projects was possible as a result of Marco Polo funding being provided.

4.69 The picture is similar when we consider the proportion of projects that went ahead following an unsuccessful application to the Marco Polo programme. In this case, our survey indicated that 5 out of a sample of 11 unsuccessful projects went ahead without Marco Polo funding, a similar proportion to the proportion of successful projects that would have gone ahead in the absence of funding. This again suggests that the true added value of the Marco Polo programme may be more limited than had been hoped.

4.70 Of those that responded to our survey, only one project financed under the Marco Polo programme had received funding from any other public sources (national and regional
funds). The respondent that indicated that additional funds had been received stated that it receives regional/national support, depending on the product and the route it takes.

4.71 The majority of beneficiaries (72 per cent of 32 respondents to Question 19 of the survey) stated that the projects would continue (or have continued) once Marco Polo funds are no longer available. This pattern held across both those that had secured funding under Marco Polo I and those that had received funding under Marco Polo II. While this indicates that short-term funding may have created long-term change, there are two issues that must be considered:

(a) existence bias — it may be the case that respondents receiving funding under Marco Polo I are more likely to respond to the survey if their projects are ongoing and hence we get an unrepresentative sample (selection bias) as far as project legacy is concerned; and

(b) response bias — this is a particular issue for Marco Polo II recipients whose projects are ongoing since they may wish to avoid indicating to the Commission that their projects will not continue in the long term even if they believe this will be the case.

4.72 Of those projects that will not continue (or have not continued) once Marco Polo funds are no longer available, the most common explanation was that the project was no longer financially viable. Other comments included that the service is of general interest and requires public support in the long run (response for one common learning action); that the project was terminated due to economic hardships in the industry; and that it is too early to tell at this stage whether or not the project will continue.

4.73 The majority of respondents that stated that the project will (or did) continue further stated that the project would not change in nature when Marco Polo funds are no longer available. Ten of the 28 respondents to this question stated that the project will (or did) change in nature and the most common explanation was that a change in location of market means a change in the route.

**Competition effects of the Marco Polo programme**

4.74 The objective of the Marco Polo programme is to support new modal shift initiatives, insofar as these do not constitute an obstacle to healthy commercial competition between transport undertakings. The necessity of the absence of distortion on competition against the common interest is mentioned many times in the regulation.24

4.75 A growing number of complaints about the distortion of competition have been lodged by competitors to Marco Polo beneficiaries and these complaints have also come earlier in

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24 For each type of action, the following Regulation states “the [type] action will not lead to distortions of competition in the relevant markets, in particular between modes of transport alternative to road transport alone or within each mode, to an extent contrary to the common interest”. 

the project cycle. A summary of competition complaints received to date is provided in the table below.

Table 4.15: Competition Complaints Statistics

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of projects affected</th>
<th>Number of Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Rail</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Rail/Maritime</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

4.76 The fact that there have been some competition complaints is not entirely surprising when it is recognised that European maritime waters and rail networks are covered by hundreds of regular routes. Given such coverage, it is almost impossible to find a single route which has not yet been exploited and on which there is a total absence of competition.

4.77 Competition complaints have become increasingly common in the Marco Polo II era. Indeed, while just one competition complaint was received for projects in the 2007 call, two complaints were received for projects in the 2008 call and 10 complaints were received for projects in the 2009 call. An advance complaint has been received for a proposal submitted under call 2010. It is not entirely clear why this is the case and there are several possible explanations.

(a) First, the recent economic downturn may have had some effect as logistics companies have faced difficulties in retaining contracts and winning new work due to reduced transportation needs as a result of reduced product demand. Therefore, the loss of any one contract would be more keenly felt and, where this loss is to a recipient of Marco Polo funding, a complaint may be more likely than in happier economic times.

(b) Second, increasing complaints may reflect an increasing awareness of the Marco Polo programme and of the identity of beneficiaries. If companies are unaware of the programme, they cannot complain about it.

(c) Third, a number of competition complaints relate to the call 2009. In this case, the fact that the funding intensity had doubled from €1 per 500 tkm to €2 per 500 tkm may have led non-recipients to perceive the programme as giving a greater ‘unfair advantage’ to recipients and hence may have prompted more complaints.

4.78 There are a number of adverse consequences for the Marco Polo programme that have resulted from competition complaints. These include:

(a) difficulty for the programme to function correctly;

(b) difficulty in daily operational management of the programme; and

(c) problems with credibility of the programme.
Evaluation Results

Stakeholder perception

4.79 Very few respondents to the beneficiaries’ survey stated that the Marco Polo programme had any adverse effects. Of 41 successful applicants that responded to the survey, there were only eight citations of adverse effects, four of whom suggested that the Marco Polo programme may have had a detrimental impact on competition in the logistics/transport sector.

4.80 Interestingly, a similar picture is true for those that applied unsuccessfully for funding under the programme — only one of 12 respondents cited Marco Polo as having had an adverse effect on competition. Interestingly, the size of the grant seems to be a consideration when analysing the competition effects: an interviewee stated that Marco Polo is too small to distort competition considering the public investment in road and rail infrastructure. A second interviewee held a similar view, stating that subsidies provided by the programme are relatively small and thus the adverse competition impact can only be measured in small percentages.

4.81 The view of those that did not apply for funding under the programme was very different. Of 30 respondents to the survey, 12 mentioned that the programme has, in their view, had an adverse impact on competition within the transport and logistics sector. However, an interviewee stated that as an evaluator for the Marco Polo programme, he believes the evaluation process ensures that competition is not affected by the programme.

Europe Economics’ perspective

4.82 Notwithstanding the views expressed by survey respondents, it is not clear to Europe Economics that there has been any significant adverse competition effects in any real economic sense (for example in terms of creation of a dominant market position, abuse of market power, collusion and so on). This view is supported by the fact that an EACI analysis of competition complaints found that the majority were based on “company feelings” about competitors receiving Marco Polo subsidies rather than real competition elements. In this context, it is possible that the complaints could be an element of market competition between the competitors rather than reflecting well-founded concerns of competition distortions.

Untapped potential of Marco Polo Programme

4.83 There are two important factors to consider when conducting an assessment of the untapped potential of the Marco Polo programme:

(a) the amount of funding allocated to projects is less than total funds available; and

(b) there is typically an underachievement of forecast gains and this can lead to the exclusion of some projects that may have had a positive impact in years where 100 per cent of funds have been allocated.

4.84 We shall review each of these factors in turn.
Untapped potential due to non-committed funds

4.85 In assessing the untapped potential associated with available funds that were not committed to any project, an important assumption is made that it would have been possible for all funding to have been put to productive use but that there were, instead, some missed opportunities. Such missed opportunities may have arisen as a result of companies with good project ideas but lacking finance and being unaware of the existence of the Marco Polo programme or because of a difficulty of making contact with and finding interested and suitable partners. On the other hand, it may also be that Marco Polo has approached the limits of its absorption capacity, including in view of difficulty to find new services which are not in competition with existing lines.

4.86 The tables below show the available, committed and paid funds for each call within Marco Polo I and II.

Table 4.16: Use of Funds — Marco Polo I

<table>
<thead>
<tr>
<th>Year of call</th>
<th>Amount available (€m)</th>
<th>Amount committed (€m)</th>
<th>Percent committed</th>
<th>Amount paid (€m)</th>
<th>Percent paid (of available)</th>
<th>Percent paid (of committed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>15.0</td>
<td>13.0</td>
<td>86.8</td>
<td>7.9</td>
<td>52.7</td>
<td>60.7</td>
</tr>
<tr>
<td>2004</td>
<td>20.4</td>
<td>20.4</td>
<td>100.0</td>
<td>11.4</td>
<td>55.7</td>
<td>55.7</td>
</tr>
<tr>
<td>2005</td>
<td>30.7</td>
<td>21.4</td>
<td>69.8</td>
<td>11.9</td>
<td>38.8</td>
<td>55.5</td>
</tr>
<tr>
<td>2006</td>
<td>35.7</td>
<td>18.9</td>
<td>53.1</td>
<td>9.3</td>
<td>26.1</td>
<td>49.1</td>
</tr>
<tr>
<td>Total</td>
<td>101.8</td>
<td>73.8</td>
<td>72.5</td>
<td>40.5</td>
<td>39.7</td>
<td>54.8</td>
</tr>
</tbody>
</table>

\( a = \) Best estimate

Source: Interview with EACI

Table 4.17: Use of Funds — Marco Polo II

<table>
<thead>
<tr>
<th>Year of call</th>
<th>Amount available (€m)</th>
<th>Amount committed (€m)</th>
<th>Percent committed</th>
<th>Maximum utilisation (€m)( a )</th>
<th>Max percent utilised (of available)</th>
<th>Max percent utilised (of committed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>58.0</td>
<td>45.4</td>
<td>78.3</td>
<td>33.9</td>
<td>58.5</td>
<td>74.7</td>
</tr>
<tr>
<td>2008</td>
<td>59.0</td>
<td>34.4</td>
<td>58.3</td>
<td>25.3</td>
<td>42.8</td>
<td>73.4</td>
</tr>
<tr>
<td>2009 (*)</td>
<td>66.3</td>
<td>66.3</td>
<td>100.0</td>
<td>51.8</td>
<td>78.1</td>
<td>78.1</td>
</tr>
<tr>
<td>Total</td>
<td>183.3</td>
<td>146.1</td>
<td>79.7</td>
<td>111.0</td>
<td>60.6</td>
<td>76.0</td>
</tr>
</tbody>
</table>

\( a = \) Theoretical maximum amount to be paid in cases of 100% success for projects which are still alive as of 3/11/2010

Source: Interview with EACI

(*') doubling of funding intensity

Note: Figures for Marco Polo II relate to projects that are currently still going and it is likely that the utilisation figures will decrease over time.

4.87 Table 4.16 shows that in the first Marco Polo programme, approximately 27.5 per cent of the available budget was not committed to any particular action, although it can be seen that 100 per cent of funds were allocated in 2004.
4.88 Table 4.17 shows that in the first three years of Marco Polo II, approximately 20.3 per cent of the available budget was uncommitted, although all available funds were committed in 2009.

4.89 To quantify the untapped potential of the programme on the basis of available but non-committed funds it is assumed that if the unallocated budget had been used to subsidise projects under the Marco Polo programme, the overall benefits in terms of modal shift, reduced greenhouse gas emissions and other impacts could have been significantly greater than was observed.

4.90 Table 4.16 shows that the €28m of available funding was not committed to any project under Marco Polo I, although all funds were committed in 2004. For our analysis we use an estimate of 298tkm, which is the average modal shift per euro of committed funds excluding 2004 projects. Given that this average includes catalyst actions but not common learning actions (since these do not have a direct modal shift objective), it is a reasonable estimate of the potential modal shift achievement of the average project, taking into account the mix of action types. On this basis, the untapped potential of Marco Polo I of non-allocated funds is approximately 8,344 million tonnekilometres.

4.91 Table 4.17 shows that the €37m of available funding was not committed to any project in the first three years of Marco Polo II although 100 per cent of the funds were committed in 2009. There is hence likely to be a significant untapped potential for this programme also. If the average efficiency of the 2007 and 2008 projects were to be the same as those of 2003, 2004 and 2005 the untapped potential would be around 11,026 million tonnekilometres. It is likely, however, that the actual efficiency of Marco Polo II projects will differ from that of Marco Polo I projects and hence the actual untapped potential may well differ from this figure.

Untapped potential due to underachievement of forecast gains

4.92 It was noted above that, at mid-December 2010, there have been two years in which all available funds have been allocated to projects — 2004 (Marco Polo I) and 2009 (Marco Polo II). This does not imply, however, that all available funds were paid to those running projects approved in each of these years. Indeed, the Marco Polo programme is designed on the basis of payments for results and hence if a project fails to achieve its forecast modal shift, those running the project receive less than full payment.

4.93 This project feature, whilst ensuring that those running projects have an incentive to achieve the greatest possible modal shift, also means that there is a risk that there is a loss arising from committed funds that are not eventually paid out. The causes of this loss can be understood as follows:

(a) there is an asymmetric information issue in that the applicant knows more about the ‘true’ estimated modal shift than does the evaluation committee; and

(b) there may be some unexpected events during the life of the project that mean that the ‘true’ estimated modal shift cannot be achieved.
4.94 The asymmetric information issue is considered to have become increasingly important over time as consultants and companies have learned how to 'play the system' and write proposals in a manner that increases the likelihood of success for their clients, in part by exaggerating the modal shift that might potentially arise as a result of the project. This can, in particular, concern smaller proposals which would otherwise not pass the eligibility thresholds. For the larger proposals, as there is rarely a reserve list established, "cheating" does not often lead to any gains.

4.95 In this context, both the applicants and the consultants are better informed of the true potential of the project than are those allocating funds to projects (DG MOVE (TREN) / EACI). With regard to the specific targets and forecasts, DG MOVE (TREN) / EACI know only the information that is in the proposal. While trade statistics and other broad-based information is available from other sources, these are likely to be of limited help in appraising and comparing the likely success of different projects. Hence it is possible that DG MOVE (TREN) / EACI (as well as the external independent experts) would be unaware that the potential benefit of the project has been exaggerated.

4.96 It is possible that a greater amount of funding would be awarded to a project than would be the case if DG MOVE(TREN)/EACI were aware of the non-exaggerated forecast of modal shift that could be expected from the project. In such cases, and in years where all funding was allocated, there is some additional untapped potential of the programme because funding could have been available to other effective projects that were unsuccessful at the application stage.

4.97 While the non-exaggerated forecast may not, in the end, turn out to be an accurate prediction of project performance (e.g. because of unexpected events during the project and imperfect foresight) it would nonetheless be closer to the eventual outcome and would mean that funding were allocated on the basis of the best estimate of project outcome available at the time.

4.98 Finally, it is also quite possible that the amount paid to a project would be less than the amount committed to it due to unforeseen circumstances and events during the course of the project. Such an eventuality may be seen as unrealised potential of the programme but we view it as of a different nature to that arising from asymmetric information since there is nothing that could be done prior to committing funding that would avoid the outcome.

4.99 The concept of imperfect foresight points to another possibility for reducing this aspect of untapped potential: allocate funding on an annual basis rather than committing funding for the whole project at its inception. With such a model, performance could be reviewed

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25 For example, it may be that those operating the programme lose an important contract and hence a lower volume of freight is transported along the project route and hence the achieved modal shift will be below the anticipated level purely as a result of market factors.
Evaluation Results

annually and committed funding adjusted accordingly. Where projects have been
terminated or are performing below expectations, it would be possible with the staged
funding model to allocate the funding to alternative projects.

4.100 For the 2004 call, only 55.7 per cent of the committed budget was eventually paid to those
running projects whereas for the 2009 it is anticipated that the final payment figure (i.e. once all projects are complete) would be 78.1 per cent, assuming that all projects currently running achieve a success rate of 100 per cent. In reality, total payments will almost certainly be lower as it is unlikely that all projects will achieve 100 per cent of forecast modal shift.

4.101 On this basis, we might quantify the ‘untapped potential’ of the Marco Polo programme as the percentage of committed funding not used in years where 100 per cent of funds were committed. While the untapped depends, in part, on the size of the shortlist that was not allocated funding another aspect of the issue relates to non-awareness of the programme. It is possible that the shortlist does not comprise all feasible projects that might have been eligible for Marco Polo funding because

(a) For the 2004 call this is 44 per cent of committed funds, or €9m. Given the average modal shift per euro was 320 tkm in the 2004 call, the total untapped potential of that call may be estimated to be 2,880 million tkm.

(b) For the 2009 call, the ‘untapped potential’ of the Marco Polo programme is 22 per cent of committed funds, or €15m, based on an assumption that all ongoing projects will achieve a success rate of 100 per cent. We do not have a reliable estimate of the efficiency of 2009 projects as many are still ongoing. However, to provide an indication of the untapped potential, if it is assumed that the efficiency of 2009 projects is 50 per cent of those of the 2004 call (reflecting the fact that the funding intensity doubled for the 2009 call), the ‘untapped potential’ would be around 2,400 million tonnekilometres.26

4.102 We recognise that only a small number of projects were placed on the reserve list in both the 2004 and 2009 calls. Therefore, it is possible that the estimates of untapped potential presented in (a) and (b) overestimate the true potential of the programme. However, it should also be noted that some feasible projects may not have been on the reserve list due to a lack of awareness of the Marco Polo programme. Therefore, the total untapped potential may be greater than the sum of forecast modal shift for projects that were on the reserve list.

4.103 However, even in these call years it is possible that some feasible project ideas were in existence but those with the ideas did not apply for funding. The estimate of untapped

26 This figure is an estimate and the true outcome may differ depending on the true efficiency of projects and the total committed funds that are eventually paid.
potential should, therefore, attempt to capture not only the potential impact of those projects that were on the reserve list, but also the potential impact of project ideas that were not known to the DG MOVE (TREN) or EACI.

4.104 At this point, it should be noted that while there is a downside to the fact that a non-trivial proportion of the Marco Polo programme budget is committed but not paid to beneficiaries, the fact that beneficiaries are paid on the basis of results is an important and positive aspect of the Marco Polo programme design. Such a feature ensures that the incentives of beneficiaries and taxpayers are aligned and there is no other mechanism that would provide stronger incentives for projects to succeed.

Revision of Marco Polo II: Regulation (EC) No 923/2009

4.105 Gellis Communications undertook a focus group of members of the Marco Polo Committee members (as established by the Marco Polo Regulation) as part of a study for EACI in 2009. One conclusion that emerged from this focus group was that whilst the recognisable financial benefit of the Marco Polo programme is the main reason that companies apply for funding, administration is seen as burdensome and so companies see the application process as a trade-off between the effort involved and the concrete benefits. In particular, it was noted that for SMEs the cost of the application procedure is a crucial issue and it was noted that economic assistance is available in Norway for applicants facing this issue.

4.106 Regulation (EC) No 923/2009 aimed, among other objectives, to further increase participation in the Marco Polo programme by SMEs and to lower the minimum subsidy thresholds for different action types (and in particular for projects using inland waterways). Between 2003 and 2009, 40 per cent of the leaders of Marco Polo projects are classified as SMEs while of all 507 companies that benefitted from Marco Polo funding (including lead partners), 53 per cent were classified as SMEs and the Regulation sought, in part, to increase this participation rate further.

4.107 Specifically, Regulation (EC) No 923/2009 introduced the following changes (applicable as from call 2010):

(a) Lower thresholds — reduced thresholds for different action types, introduced concepts of ‘yearly’ rather than overall thresholds and introduced very low minimum subsidy threshold for projects using inland waterways.27

(b) Minimum duration of contracts and possibility for extension — a minimum duration of 36 months applies to catalyst, traffic avoidance and motorways of the sea actions while there is no minimum duration for modal shift and traffic avoidance actions. This implies some operational problems and the Commission is aware of this. Common

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learning actions may be extended by up to 26 months if positive results are achieved during the first 12 months of operation while other actions may be extended by up to 6 months in the event of extraordinary implementation delays.

(c) New definition of freight — rather than modal shift being calculated on the basis of net freight transported the definition now includes the weight of the intermodal transport and the road vehicle (including empty intermodal transport and road vehicles) where these are shifted off the road.\(^{28}\)

(d) Possibility of applications by single undertakings — it is no longer necessary to bid as part of a consortium.\(^ {29}\)

(e) Financing of ancillary infrastructure — all action types other than common learning actions can now receive finance for ancillary infrastructure (up to 20 per cent of the total eligible costs of the action). Ancillary infrastructure is defined as adjustments to existing infrastructures that are necessary for carrying out the action but are not the main aim of the project, i.e. transport services.\(^ {30}\)

4.108 It is currently too early to conduct a detailed quantitative assessment of the impact of this regulation but a qualitative assessment is possible. Our approach to this, given that no direct data are available at present, has been to interview successful applicants, unsuccessful applicants and non-applicants for Marco Polo funding about what they believe the impact of the amendments in the regulation may be. A brief summary of responses is provided in this section.

Lower thresholds

4.109 The views of those that had successfully applied for funding under the Marco Polo programme were mixed concerning the benefit of lowering thresholds. While it was recognised that this action would make it easier to participate and result in more applications, one interviewee stated that higher thresholds mean that smaller firms have to collaborate which it sees as a good thing.

4.110 Unsuccessful applicants for funding were also divided in their opinions with one interview stating that lowering thresholds would encourage smaller and more innovative actors to apply for funding while another argued that thresholds should not be amended.

4.111 The impact of lower thresholds can only be analysed following the official adoption of the final results of the 2010 call. This had not happened as of the date of this report. However, based on unofficial statistics four of 32 projects have benefitted from the lower thresholds since the call 2010.

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Evaluation Results

**Minimum duration of contracts and possibility to extend contracts**

4.112 The vast majority of interviewees that had received Marco Polo programme funding agreed that this is a sensible proposal that is likely to help projects to succeed. The main argument is that there are likely to be delays in the initial phase of projects and so prolonging the project can enhance success. One interviewee suggested that the change would allow more innovative projects and argued that this is beneficial because smaller projects encourage innovation and are generally more successful than big projects which often fail.

4.113 Unsuccessful applicants were not in favour of this policy due to a concern that there would be an unintended consequence of slowing down the performance of projects. However, given that companies are always paid on the basis of results, and that the overall goal of the Marco Polo programme is to create a more sustainable transport system, we consider that the possibility of permitting extensions when considered justified by EACI is a positive amendment that should help to improve the success rate of projects.

4.114 As the possibility of extension has been applicable only since call 2010 and contracts for this call had not been signed at the date of this report it is not possible to assess the impact of the extension possibilities introduced by Regulation (EC) No 923/2009.

**New definition of freight**

4.115 The majority of those that received funding under the Marco Polo programme felt that including empty containers and transport units in tonnage calculations is important and would be beneficial as it can reduce project risk.

4.116 Among unsuccessful applicants there were two different views on whether or not this would be beneficial. One argued that as well as amending the definition of freight it is important to reconsider the definition of European benefit as well since there is a benefit even if transport does not cross national borders.

**Possibility of applications by single undertakings**

4.117 Recipients of Marco Polo funding had mixed views about this policy. Some considered that requiring applications to be submitted by a number of partners enhances the credibility and success of projects while one noted that collaboration is important for common learning actions. Others, however, felt that the policy is sensible and will encourage applications and that it would save time that would otherwise be spent looking for trusted partners.

4.118 Unsuccessful applicants were similarly mixed in their views. One stated that the policy would deliver benefits to the programme while another queried whether a real European benefit could be obtained without partnerships.

4.119 This possibility has been applicable only since call 2010 and as noted above the final results of the call have not yet been officially adopted, meaning that a robust assessment
of the impact is not possible at this stage. However, based on unofficial statistics there may be 11 projects out of 32 selected that have a single undertaking as beneficiary (i.e. 34 per cent of selected projects).

Financing of ancillary infrastructure

4.120 Funding of ancillary infrastructure (understood as the necessary and sufficient infrastructure to achieve the goals of actions, including freight-passenger installation) is permitted for all except for common learning actions\(^{31}\). At present, this is currently being used as much as it is incorporated in the total financial business plans. As such it is evaluated according to the different criteria for the overall proposal. In the operational financial reality payments are generally made on the basis of tkm achieved rather than on the eligible costs or losses which in practice means that ancillary infrastructure is not financed in their own right or under separate provisions.

4.121 Again, interviewees that had received funding under the Marco Polo programme were divided over the merits of this policy. Arguments against generally suggested that the Marco Polo programme should not be financing ancillary infrastructure, partly because infrastructure finance is available through the TEN-T programme. However, others argued that this may help to encourage applications for projects that require such investment and hence have a greater degree of risk.

4.122 Unsuccessful applicants argued against the concept of Marco Polo providing funding for ancillary infrastructure as there are other sources of funding for this.

Conclusions

4.123 It is difficult to determine, at this stage, what the impact of Regulation (EC) No 923/2009 will be. The impact will be more apparent when data on the 2010 call for proposals are available. However, based on the views of stakeholders in the programme, the regulation appears likely to lead to an increase in applications for funding and may help to increase the proportion of forecast modal shift that is achieved.

Analysis at Project Level

4.124 We selected a sample of 14 projects on which to base our analysis of the Marco Polo programme at project level. In the majority of cases, those operating each of these projects had responded to the survey presented in Appendix 1 of this document and were subsequently interviewed over the telephone. In some cases for Marco Polo II, due to a lack of responses to the survey from those running a particular type of action, it was necessary to conduct an interview without receiving a survey response. In such cases, the case study analysis is a little more limited but we considered it crucially important to

\(^{31}\) Regulation EC 1692/2006, Article 2.
include as broad a sample of projects as possible in our analysis. To exclude, say, motorways of the sea actions from the project-level analysis would not have been appropriate since the views of those running motorways of the sea projects may differ from those that run other types of projects.

4.125 The sample of projects on which the analysis was based was selected on the basis of covering different action types, modes of transport, years of call and countries of interviewee.

Marco Polo I

4.126 Five projects were selected for the first Marco Polo programme. We attempted to select as broad a sample of projects as possible and included at least one project for each action type that was permissible under Marco Polo I. The selected projects reflect the fact that the most common transport mode under Marco Polo I was rail and included partners from several different European countries. As only three projects financed under Marco Polo I involved transport on inland waterways (i.e. less than 6 per cent of all projects funded under Marco Polo I), such a project is not included in our sample as to do so would be unrepresentative of the reality. Unfortunately, it was not possible to include a SSS-only Marco Polo I project due to a lack of survey responses and difficulties contacting funding recipients. However, one of the selected projects has a SSS component and is included in the sample.

Marco Polo II

4.127 Nine projects were selected for detailed study for the second Marco Polo programme. We attempted to select as broad a sample of projects as possible and included at least one project for each of the five action types that were permissible under Marco Polo II. The selected projects reflect the fact that the most common transport mode under Marco Polo II was rail and the second most common was short sea shipping. We selected partners from several different European countries.

4.128 It should be noted that the majority of projects taken for analysis in this section are still at an early stage of their planned lives so statements concerning whether or not the project will continue following the end of the Grant Agreement were treated with caution. It is quite possible that those running the projects perceive that there is an incentive to state that the project will continue even if they believe this will not be the case.

32 We tried to secure an interview with an organisation that had operated an action based on short sea shipping alone, but this was not possible given the responses received to our online survey.
Insights from the project level analysis

4.129  We summarise the findings of the project level analysis under the same three headings as were used to analyse the results of each individual project: funding and displacement; administrative requirements; and legacy.

(a) Funding and displacement

4.130  The Marco Polo has been the only source of public sector funding for the majority of projects and hence there has been little overlap between funding sources. Complementary State aid was used for only one project in the sample studied.

4.131  Project ideas were typically in existence before the partners were aware of the Marco Polo programme and, in general, the programme does not seem to have caused existing project ideas to be modified so as to benefit from funding. This calls into question the extent to which the Marco Polo programme fully adds value relative to what could be achieved through private sector initiatives.

(b) Administrative requirements

4.132  A number of funding recipients found certain sections of the application difficult to complete but there is no clear consensus on the specific sections that proved difficult. This implies that either the whole application form in difficult to complete or, most likely, that each section of the form is relatively clear to the average applicant but random difficulties occur. The criteria on which applications would be evaluated were generally considered to be clear.

4.133  There was a division of views concerning the accessibility of the Marco Polo programme for SMEs. Interestingly, it is not simply the case that SMEs consider it to be difficult and non-SMEs otherwise — the pattern is more complex such that some SMEs consider access to be difficult while others have found no problems.

4.134  Funding recipients are generally happy with the management of the programme by EACI and administrative costs during the project period were typically considered to be moderate at approximately 5 per cent of the grant received under the Marco Polo programme.

(c) Legacy

4.135  There is no clear pattern from the project level analysis with regard to the legacy of the Marco Polo programme. Some projects have continued (or are expected to continue) following the end of the Grant Agreement, either in the same form or with a change in route, while others have not continued (or will not continue). Reasons for the latter outcome have included the end of a project during the period of the Grant Agreement due to financial difficulties and a perception that the project is not viable without public sector funding.
Geospatial Analysis

4.136 The presentation of data on a dynamic map can help users to identify patterns in the data, and to observe differences and similarities across different geographical areas. Our subcontractors Zubed have created a visual representation of the success of Marco Polo projects, with some selection criteria (year, mode, action type) that can be applied to the interactive map.

4.137 Figure 4.5 below shows an example screenshot of the map that has been produced by Zubed. The map illustrates the percentage of foreseen modal shift that has been achieved for various Marco Polo projects. The data have been placed into three colour-coded bands:

(a) red represents the achievement of 0 per cent of foreseen modal shift and thus includes projects that never began and those that have not yet reported data to EACI;

(b) orange represents the achievement of 1-33 per cent of foreseen modal shift;

(c) blue represents the achievement of 33-66 per cent of foreseen modal shift; and

(d) green represents the achievement of more than 66 per cent of foreseen modal shift.

4.138 Each project is clickable, resulting in a pop-up balloon that describes the project (using the description from the EACI monthly monitoring spreadsheet).

Figure 4.5: Screenshot of rail projects

4.139 The geospatial analysis provides a number of instructive conclusions:
(a) the geographical reach of Marco Polo has increased significantly over time. For example, the majority of projects awarded in the 2004 call connected Member States whereas connections to Russia and Ukraine were established through projects under the 2008 call;

(b) modal shift actions have the widest geographical spread (not least because the majority of actions have been modal shift) although the greatest concentration of such actions includes at least one terminus in the Benelux or Germany;

(c) in the main, catalyst actions take a north-south route through central continental Europe;

(d) while a large number of actions based on short sea shipping have included Spanish ports, actions that have connected ports located in northern Europe have been particularly successful;

(e) actions that have made use of combined transport modes including SSS have typically included a terminus in the UK or Russia;

(f) a large proportion of rail actions have a terminus in the Benelux or Germany;

(g) the most successful rail actions have been those that connect Germany with one of its neighbours;

(h) projects that utilise inland waterways are concentrated in central Europe while combining inland waterways with an additional mode of transport has allowed a wider geographical scope; and

(i) there has been limited participation in the Marco Polo programme from Scandinavian countries and Eire while no project has established a connection to Malta or Cyprus.

Management Evaluation

4.140 This section evaluates the management of the Marco Polo programme. We first evaluate the processes and activities usually undertaken as part of the management cycle and assess the impact of delegating management of the programme to the EACI. We then move on to assess the potential benefits and drawbacks of managing the programme under TEN-T Executive Agency.

Overall management of the programme and impact of delegation to EACI

4.141 The most important managerial areas of the programme are essentially four:

(a) call for proposals;

(b) evaluation procedures;

(c) monitoring the performance; and
(d) dissemination of results.

4.142 These are the basic elements in our evaluation of the management of the programme.\textsuperscript{33} We will review them in turn.

\textit{Call for proposals}

4.143 The first required step in the programme cycle involves drafting the work programme and call text. The responsible body for drafting the call is DG MOVE but this is done in close collaboration with EACI.\textsuperscript{34} EACI is responsible for the diffusion of the information and guidance to help potential applicants.

4.144 The call text explains the structure of Marco Polo funding and the eligibility, selection and award criteria. It also provides, in the Marco Polo web pages\textsuperscript{35}, instructions on preparing and submitting a proposal. These include guidance notes on how to make the submission successful, a checklist of required information and a calculator for working out the volume of freight shifted off the road by the proposed project.

4.145 Following the recommendations of the first evaluation of the Marco Polo programme, EACI commissioned a work to assess the communication and marketing activities of the programme, as well as its opportunities and threats. The recent publication of the study in 2009 means it is appropriate to include some of its findings in this evaluation.

4.146 Awareness of the programme as a means to encourage intermodal freight transport is around 57 per cent across logistics and supply chain management and road and non-road transport operators (although 63 per cent of interviewees recognised the programme from a description read out to them). As many as 35 per cent of such companies had never heard about it. The awareness is different by subsectors: there is only a 43 per cent and 54 per cent level of awareness in the logistics and supply chain management and road transport interviewee groups, respectively, compared with 78 per cent in the non-road transport group.

4.147 The study concludes that the awareness of the programme could be improved. In particular detailed information should be made more easily accessible through the website and the programme review.

4.148 Results from our survey (see Appendix 3) illustrate that participants are currently aware of the programme mainly because of their participation in past applications. In the same

\textsuperscript{33} These are similar to the findings in a previous study which describe the managerial responsibilities as a continuous cycle of tasks and activities consisting of programme preparation, programme implementation, programme monitoring and evaluation, and finally promotion and dissemination of programme results. The tasks are seen as very similar for Marco Polo I and Marco Polo II (Cost-effectiveness study concerning the externalisation of programme management tasks related to the second “Marco Polo” Programme: 2007-2013, final report).

\textsuperscript{34} We are grateful to EACI for providing the Internal Vademecum of the programme, which provides a guide and understanding of the programme and its management.

\textsuperscript{35} See http://ec.europa.eu/transport/marcopolo/
survey we also find that beneficiaries also mention the internet, their partners or suppliers and conference/workshop as important and useful communication methods. Amongst the group of non-applicants, as many as 25 (of 30) had heard about it through conferences, the Marco Polo information day, internet sources or through a special contact which was familiar with the programme. This suggests a good coverage of the programme, and we infer that it is likely that players active in attending regular sector meetings will be informed, at some point, about the programme.

4.149 The evaluation of Marco Polo I found that the call for proposals was clear in text and procedures for most partners but that the application process was viewed as complex. In particular, many participants needed assistance from consultants to submit proposals and many applicants experienced difficulties in the calculation of eligible modal shift of freight. The Marco Polo calculator (introduced in 2004) was often used for the calculations but apparently was not always used in the correct way.

4.150 Our survey indicates that there are still difficulties in writing some elements of the proposal: almost 45 per cent of successful applicants stated the environmental benefits and external costs savings sections as the hardest elements of the proposal; distortion of competition was selected by over 35 per cent of the respondents. The most striking finding of our survey is the fact that close to 80 per cent of beneficiaries used consultants to draft the proposals, and, moreover, 70 per cent of them believe this was an important element for the success of the application.

4.151 The opening of proposals is responsibility of EACI and this is done following standard formal procedures. For this purpose, an opening Committee is appointed within EACI which is constituted of at least three persons. After the opening, an evaluation takes place with the aim of selecting the best proposals according to the evaluation criteria specified in the call. The evaluation and selection of project is done in two steps.

4.152 First a technical pre-evaluation of each proposal is made by a designated team of experts who report their result in a standardised evaluation sheet. During this process, project officers would make sure a harmonised methodology and impartial judgments are used. To assess the quantitative elements of the proposals EACI has developed evaluation tables which provide a standard scoring system in an objective way. The score can be modified with extra points given according to other type of benefits. At this stage, the financial capacity of applicants is assessed in parallel by financial officers to ensure undertakings are legally constituted and registered.

36 The evaluation of Marco Polo 2003-2006 it was also noted the difficulties experienced by participating with the reporting formats, and it was recommended to use standard formats and templates.

37 In the Ex ante evaluation, the use of the tonne-kilometres criterion for evaluation was seen a being biased towards long distance transport and bulk transport. Nevertheless, the measure was regarded practical and clear metric useful in project selection as long as it was used in conjunction with other measures of external benefits.
4.153 In a second step, an evaluation committee is appointed in order to confirm or reject the projects in the pre-evaluation list. The Evaluation Committee includes the Marco Polo Head of Unit, a representative from another unit of EACI, and representatives from the Commission services.

4.154 The selection of projects takes into account the contribution in terms of tonne-kilometres shifted off the road, as well as the relative environmental merits of the proposed actions and their contribution to reducing road congestion. The way to calculate the external benefits is explained in the call for proposals (and documents are available on the programme web site). At the same time projects are evaluated on their quality and the readiness of projects to be carried out as illustrated in the business plans.

4.155 As a result of the selection process, the Committee recommends a list of proposals to the Authorising Officer by Delegation (AoD) who has the ultimate responsibility for the grant award decision.

4.156 After approval of the list of selected proposals (by the Director of EACI), negotiations with the selected projects begin. Negotiations at this stage aim at receiving more detailed information and clarification on issues raised during the evaluation. A successful outcome of the negotiations leads to the signature of grant agreements.

4.157 In the Marco Polo 2003-2006 report, the evaluation process was perceived as being complex, non-transparent and requiring a long time between contract negotiations and contract signature. Stakeholders were, nevertheless, positive about the transparency of the award criteria and importance of the criteria in itself.

4.158 The findings are corroborated by our survey, which indicates that the evaluation criteria were clear to the majority of beneficiaries. Moreover, 75 per cent of unsuccessful respondents believe that the application received a thorough and objective review, and sixty per cent feel the feedback received from the evaluators to unsuccessful applicants was explained clearly. Turning to the sample of non-applicants, we have reported that respondents believe that the application procedure can be too complex or time consuming, but the main reason for not applying to the programme has been the difficulty in identifying a specific project suitable for funding.

4.159 The definition of the award criteria for the different actions is now clearly described and available from the Marco Polo website. There are concerns that in having the objectives so clearly described may paradoxically go against the selection process as some applicants may choose to deliberately overstate the targets in the proposals in order to receive higher scores.

38 The adjudication process was also seen as confusing: one project was originally classified as not eligible but the decision reversed several days later. Another project was initially rejected but subsequently awarded funds some months later.
Interestingly, Europe Economics has been provided with an analysis of the evaluation scores and project outcomes which suggests a very small (if not negligible) relationship between the two factors. Based on information from EACI we have examined the correlation between the credibility score of the proposals and the Modal Shift effectively achieved by the actions.\footnote{EACI’s internal study covered the following action types: Modal Shift (MOD), Motorways of the Sea (MOS), Catalyst (CAT) and Traffic Avoidance (TAV) actions. Common Learning actions (CLA) were not included, as these do not directly produce modal shift. The actions included in the study were all which have been recommended for Marco Polo funding since 2003 and which are contractually closed. In total this analysis has considered 112 actions and includes actions which have followed their normal three- or five-year lifecycle.}

The \textit{Credibility and Viability of the Action} is a score assessed during the technical evaluation process. It provides an important award criterion of the assessment of Marco Polo proposals and weights 50 per cent of the total award criteria. The achieved modal shift for each relevant action is calculated as tkm achieved vs. tkm proposed, in percentage terms.

\textit{A priori} one would expect some correlation between the credibility score and achieved targets, so that the greater achievements are seen in more credible proposals. In fact that analysis shows no relationship between the two factors. A simple correlation showed a very small coefficient (below 0.1) and a regression (including a constant term) showed that the relationship between the two factors was statistically not significant.\footnote{Detailed results not presented for reasons of confidentiality.}

We also examined this relationship across years of the call to see if there was any effect of the introduction of the external evaluation and the new role of automatic scoring (in 2007), or the new approach to distortion of competition, being less stringent at evaluation stage compensated with stronger provisions in the contract (since 2008). In all but one year, the relationship between credibility score and achieved targets is very small and statistically insignificant (Figure 4.6). The only exception is the results observed for 2004 which show a positive and significant small relationship of 0.04. However, the results for that year are based on a small sample of 10 cases and are heavily influenced by the presence of two observations which were stopped before completion (and hence achieved a result of 0 per cent). The results excluding those two observations show a statistically insignificant relationship at a 5 per cent level of significance.
The main conclusion of the analysis is that the proposal scores and actions results are, perhaps counter intuitively, independent. This means that the drafting and quality content of a proposal is not an indication of the likely success of the action.

The EACI internal paper points to different possible explanations such as the change in market conditions due to the time lag between proposal writing and final action delivery or applicant's subjectivity or optimism when preparing the proposals. But one of the underlying suspicions is that the modal shift forecasts proposed may have been exaggerated to take advantage of the scoring methodology, which favours proposals forecasting high modal shift.

In view of this analysis we suggest some simplification in the proposals evaluation process might be considered without compromising the quality of the overall procedure.

Monitoring

A procedure to systematically follow-up on the performance of different contracts was implemented when EACI took the operational management of the programme. From conversations with EACI, we understand the follow-up system is based on a detailed
analysis of intermediate and final reports, and also on operational field visits made by project officers. This allows EACI to have an accurate understanding of the status of projects running.

4.168 Despite this effort, it is recognised that the analysis of reports provided by the recipients and site visits do not allow a proper quantification of the real traffic diverted, and the reported figures rely ultimately on the declared amounts by the recipients. Given that in most cases the final financial amount paid is proportional to the tonnes displaced, monitoring of the programme is ultimately dependent on the declarations made by the recipients. While EACI-administered systems for recording modal shift are absent in many cases, since call 2009 there is a system for auditing the declared tkm of beneficiaries.

4.169 For projects with actions unrelated to, or with objectives over and above, modal shift the assessments of effectiveness and monitoring of the programmes is even more difficult.

4.170 One further element of management during the project life cycle is that of competition complaints. Proper management of competition complaints by the EACI requires a lot of time and work through checks and meetings with the concerned parties. The complaining parties take these attacks on their commercial interest very seriously but the EACI is clear that the plaintiff must bring clear proof (e.g. figures, indexes, copies of documents) that competition has been distorted.

4.171 After signature, the EACI still has the power to cancel the contract on the basis of proof that the subsidies received were used as a means to distort competition or to artificially lower costs of sales. It is, however, very difficult to prove in a formal way the existence of a real distortion of competition due to the capture of customers. EACI has limited powers in this area and the legal tools available to it do not really allow for an in-depth, on the ground investigation. The only formal tool at its disposal is to remind the recipient of his contractual obligations or to terminate the contract (Article I.12.1 of Grant Agreement).

Dissemination of results

4.172 It is important that market players and users are aware of the achievements of the programme, not least because this would help to encourage future applications. The ex ante evaluation of Marco Polo II (2007-2013) recommended increasing awareness of the programme, making especial use of the current website to include successful projects and to indicate the type of projects that are eligible for funding.41

4.173 At present, the Marco Polo website contains a wealth of information about past projects. It also contains descriptions of particular projects. In the same site there is information

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about promotional tools, events, and press corner. In addition, a Marco Polo helpdesk is available to solve questions when preparing the applications.

**Overall**

4.174 One of the most important changes over the life of the programme was the transfer of management in 2008 from the Commission to the EACI. Commission officials believe that this resulted in an “improvement in its operational management”. It is difficult to analyse improvements in the management of the programme by comparing performance indicators as data are not available before 2008. However, reports from EACI indicate a number of improvements in the management requirements and performance of the programme from 2008 onwards:

(a) the number of applications received has increased from 46 in 2008 to 101 in 2010, requiring more managerial time for processing and evaluating them;

(b) there has been a significant improvement in the average time to contract which has fallen from 461 days in 2008 to 328 days in 2010; and

(c) the average payment time is below the target of 30 days, as evidenced by average payment times of 25 days in 2008, 16 days in 2009, and 24 days in 2010.

4.175 The results of our survey corroborate these improvements. According to the respondents, the overall assessment of EACI agency is reflected to be “very good” or “good” in 23 (out of 30) of the beneficiaries (80 per cent). This includes “very good” or “good” ratings in at least 15 of the responses for different managerial aspects of EACI.42

4.176 The comparison of the management under the Commission or EACI needs to consider the differences in resources allocated in both cases. Conversations with DG MOVE officials indicated that the staff size for management was in the order of 4 full time equivalents (FTE) in 2007 (plus part-time staff for evaluation of projects) when the programme was managed by the Commission. The figure compares well with 6.3 FTE provided for 2006 in the cost-effectiveness study on the externalisation of programme.43 In the same study it was estimated a requirement of 16.5 and 18.5 FTE for in-house and EACI management, respectively, in a future peak situation in 2013.

4.177 Hence, an important part of the improvement experienced since 2008 can undoubtedly be attributed to increased staffing.44 In turn, this has allowed EACI to provide increased

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42 This includes: the time taken to assess applications and make awards; contracting arrangements and procedures; monitoring arrangements and procedures; application procedures and timescales; requirements regarding activity and final report; time taken to process requests for payment; different aspects of programme management; information about the programme; and responsiveness of EACI to requests for information.

43 Cost-effectiveness study concerning the externalisation of programme management tasks related to the second “Marco Polo” Programme (2007-2013).

44 The current staff size managing Marco Polo in EACI is in the order of 12 FTE, and this excludes around 2-3 FTE responsible for indirect administrative tasks (communication services, payrol, audits, human resources,.. which did not exist under the..
assistance to applicants by setting two new functional mailboxes and a help desk with a dedicated phone number for solving queries about the programme. During the two- to three-months of the open call period, between 900 and 1000 requests are managed by EACI’s helpdesk, providing responses in less than 24 hours; during out-of-call periods there are about 2-4 daily requests.

4.178 In previous studies there has been the perception that the application procedures were complex. We did not find overwhelming evidence of this in our survey to non-applicants (the main reasons for not applying were more related to the inability to find suitable funding). We do note the presence of consultants in preparing the proposals and the importance of these has been emphasised by successful applicants. This suggests there may be a barrier or difficulty for applicants when filling their own application.

4.179 The main weakness of the programme is the inability to allocate all the available funds to beneficiaries. During the first years this could be attributed to a lack of awareness among the targeted audience, evidenced by the fact that only 73 per cent of funds were committed in Marco Polo I. Later, this was attributed to the poor quality of proposals and drop out of short-listed projects during the evaluation process, or projects failing to achieve their planned objectives.\textsuperscript{45}

4.180 Moreover, as the award amount is linked to targets achieved, this means that the payments to beneficiaries are normally below the EC contribution agreed. As a result, the final paid funds is even lower than the committed amounts. This makes the difference between the available funds and final payments even larger. This may be because some applicants may deliberately overstate their targets in the proposals in order to receive higher scores. The fact that the scoring system is clearly described and linked to tkm (in the case of modal shift actions) makes this a very plausible possibility. Also, the fact that beneficiaries are increasingly using consultants in their proposals also indicates that there may be an increasing understanding of the evaluation criteria (and the scoring system) and hence some may submit applications which will be successful in the evaluation stage but will not necessarily achieve the planned objectives.

Management under EACI

4.181 We also compare the management of the Marco Polo programme currently under EACI to the management of the TEN-T programme under the TEN-T Executive Agency (TEN-T EA). Following the elements investigated in the cost-effectiveness study on the externalisation of programme\textsuperscript{46}, we enquired about the relationship and interactions

\textsuperscript{45} Based on evaluation Marco Polo 2003-2006 and conversations with Commission officials.

\textsuperscript{46} In 2007 the Cost-effectiveness study concerning the externalisation of programme management tasks related to the second “Marco Polo” Programme (2007-2013) concluded recommended the externalisation of the management of the Marco Polo programme to the IEEA Executive Agency. The study studied the costs and benefits of externalisation based on four main grounds: (1) the reduction of administrative burden and procedures; (2) the improvement of project management thought more specialized staff; (3)
between policy objectives of both programmes; similarities/differences in the management of the programmes; and potential synergies or economies of scale of managing both programmes under TEN-T EA.

**Relationship and interactions between policy objectives of the Marco Polo and TEN-T programmes**

4.182 There is some potential complementarity between both programmes in the sense that one provides funds for transport infrastructure while the other provides funds for transport services using those infrastructures. This complementarity has led some stakeholders to suggest that the combination of both programmes under the same agency could be beneficial, as long as it helps aligning the objectives of the programmes and avoiding any duplication or unintended effects of running the programmes separately. It has also been suggested that constructors and service providers could submit joint proposals explaining how infrastructure and services projects could work together towards the same objective.

4.183 However, the very nature of support to services and infrastructure also point to important differences. The provision of Marco Polo financial support to transport services usually needs to respond to a demand that it is very specific in terms of a moment in time and precise locations. On the other hand, the infrastructure envisaged in the TEN-T programme can take a long time to be fully operational which makes it very difficult to plan for support of demand actually needed when the infrastructure is available.

**Similarities/differences in the management of Marco Polo and TEN-T programmes**

4.184 At present, both programmes have a fundamental difference in the relationship with their beneficiaries.

4.185 In the case of Marco Polo, the funding decisions are adopted by the Commission on the basis of the list adopted by the evaluation committee composed of Commission and EACI representatives. Furthermore, since there is a contractual relationship between the Agency and the beneficiary, the former may subsequently (within the framework of the EU financial regulation) change the specifications of the contract (to account for changes in the market, for example). Since the revision of the Marco Polo Regulation in 2009, the list of projects is adopted by the Commission without approval by the Marco Polo Management Committee.

4.186 For TEN-T, the signatory of the contractual relationship is not the Agency but the Commission, so that any potential amendments are subject to the Commission approval (unlike for Marco Polo projects). Every year the TEN-T EA ‘proposes’ to the Commission the list of projects to be approved under a regulatory committee, and because this

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the synergy and economies of scale achieved from managing several programmes in the same organisational structure; and (4) the release of Commission staff capacity for policy issues.
involves the allocation of funding for different Member States, the list of projects to be funded is subject to the committee's approval. In this case, there is no contract between TEN-T EA and the recipient of funding and a Commission funding decision is notified to the Member States allocating funds to the recipient. The Commission funding decision has the same enforcement powers as private contracts but amending a Commission decision is more complex from a procedural point of view compared to changing grant agreements under Marco Polo, and takes also longer.

4.187 It is clear that, as in the Marco Polo support is given to private companies in a competitive environment, the issue of distortion of competition is more sensitive compared to infrastructure funding. The TEN-T programme faces this difficulty to a much lesser extent because financial support is given to infrastructure projects previously approved by Member States and open to all private operators. Instead, the TEN-T programme has to deal with critical issues related to the procurement procedures followed by beneficiaries. The European public procurement rules are strict and it is hence important to ensure that beneficiaries of TEN-T funding (i.e. Member States) are fully compliant with the European tendering requirements. Non-compliance would mean that there could be an unfair advantage conveyed to some firms.

4.188 Furthermore, beneficiaries of Marco Polo are mostly private enterprises, whereas the beneficiaries of TEN-T are mostly Member States, this entails a different financial risk environment for the European Union interest.

4.189 Operational aspects also make the management of the programmes very different. In particular the interaction with beneficiaries (SME and relationship with the industry), the necessary arrangements of the payments and recovery, and the management of the grant agreements and need for flexibility for any potential contract amendments are special features of the Marco Polo programme.

**Potential synergies or economies of scale between the Marco Polo and TEN-T programmes under one executive agency**

4.190 We have investigated whether there are potential savings from undertaking the different programme operations by a single agency, for both programmes under their current design. This explores the productivity of different agents working together (synergy) and the increased productivity due to producing a larger output (economies of scale). We investigated any effects on the following operations: awareness of its beneficiaries, evaluation of tenders and monitoring of projects.

(a) Beneficiaries

The beneficiaries of the projects are generally different. In the case of TEN-T, beneficiaries are mainly Member States and bodies operating under public supervision, while in the case of Marco Polo beneficiaries are companies or small and medium enterprises. This means that there are no potential gains from targeting the potential audience together. Awareness campaigns, marketing efforts, and even
display of information or responses to queries need to be specific and probably need to be done independently for every programme too. Furthermore, EACI can exploit some synergies at the level of EACI’s communication officers because of the similar nature of recipients apply for funding under several programmes run by the Agency.

(b) Evaluation of tenders

The evaluation of the projects relies often on the opinion of experts and there is potential that the same group of experts could be used to evaluate projects under both programmes. However, the experts are already external and unrelated to the Agencies and this means the situation would not change if both programmes were provided by the same Agency.

(c) Technical monitoring

4.191 There are some potential savings to be reaped from the monitoring and follow-up of projects. But because of the different nature of the programmes the type of controls undertaken is very different. In the case of TEN-T the cycle of projects is longer, projects go through very different stages and the output is relatively easy to observe, i.e. infrastructure or studies. In the case of Marco Polo the justification needed to receive the funds is different since it is mostly measured in terms of modal shift and the monitoring needs to verify whether targets have been achieved and more regular visits are required. In terms of policy feedback to the Commission, however, there could be some savings from synergies stemming from a greater specialisation of staff. Specialisation would mean that staff would benefit from exchange of knowledge between Marco Polo and TEN-T project managers resulting in added value for the Commission in terms of feedback for policy purposes.

4.192 Finally, if both programmes were managed by the same Agency, they could benefit mutually and evolve into a more similar environment, not least in the current context of discussions for the budgets of the next 5 to 7 years. For example, Marco Polo is often criticised for not making use of all its committed funds (as seen, this is due to poor response to Calls in the past, but also to projects failing to achieve their planned objectives). Whereas EACI engages the whole Marco Polo funding up-front, for the so-called multi annual projects TEN-T EA allocates its funds using an instalment approach, such that it is not necessary to commit all funding for a project at the very beginning. This mechanism allows for recycling a substantial proportion of funds to new calls for proposals when needed and much better use of the Union funds.

Relationships between Marco Polo and Other Programmes

4.193 An important aspect of the evaluation of the Marco Polo programme is to evaluate the relationship of the programme to other EU and national funding programmes. In this section, we assess the relationship between Marco Polo and the following programmes:

(a) TEN-T (EC);
(b) Ecobonus (Italy);

(c) Competitiveness and Innovation Programme (EC, including the Entrepreneurship and Innovation Programme and the Intelligent Energy Europe Programme);

(d) FP7 (EC); and

(e) Structural and Cohesion funds (EC).

4.194 We also discuss the complementarity between the Marco Polo programme and State Aid.

**TEN-T**

4.195 The TEN-T programme dedicates financial support towards the realisation of important transport infrastructure projects. The TEN-T programme consists of hundreds of projects, defined either as studies or works, whose ultimate purpose is to ensure the cohesion, interconnection and interoperability of the trans-European transport network, as well as access to it. TEN-T projects, which are located in every EU Member State, include all modes of transport.

4.196 As a whole, TEN-T projects aim to:

(a) establish and develop the key links and interconnections needed to eliminate existing bottlenecks to mobility;

(b) fill in missing sections and complete the main routes - especially their cross-border sections;

(c) cross natural barriers; and

(d) improve interoperability on major routes.

4.197 The Trans-European Transport Network is being established gradually by integrating land, sea and air transport infrastructure components, and by including the necessary technical installations, information and telecommunication systems to ensure smooth operation of the network and efficient traffic management.

4.198 The TEN-T programme has recently been subject to a comprehensive review and, on the basis of that review, proposals have been formulated for the future of the programme. The basic framework for the new trans-European transport network is a dual layer planning approach, consisting of a comprehensive network as the basic layer and a core network.

4.199 The comprehensive network will ensure accessibility of all regions of the Union. It will include road, rail, inland waterways, maritime and air infrastructure network components, as well as the connecting points between the modes.
4.200 The multi-modal core network will overlay the comprehensive network and will represent the strategically most important part of the trans-European transport network. It shall enable a concentration of trans-national traffic flows — both for freight and passengers — and will be formed of nodes and multi-modal links between these nodes. Nodes will include selected urban nodes, economic centres and major connecting points between modes, including core network ports and airports. In most cases the core network will be formed of existing infrastructure although missing geographical links and missing links connecting modes of transport will be a priority under the core network.

4.201 At present, there are several corridor concepts in existence, such as rail freight corridors, ERTMS corridors and "green corridors". The new TEN-T Guidelines will merge these different concepts into multi-modal corridors. Within this context, Motorways of the Sea projects will be a building block of the maritime dimension of the future TEN-T and hence there is a clear potential synergy here with the Marco Polo programme. In this context, ports and their hinterland connections will merge into the multi-modal corridors, notably for freight.

4.202 It is understood that corridors would be determined top-down for the most important traffic flows, starting from important entry points into the network, integrating the main cross-border sections and physical bottlenecks still to be realised. Corresponding to the main traffic flows, they can be expected to be partially based upon the Priority Projects, the ERTMS and rail freight corridors but shall evolve to multimodal corridors, allowing deploying transport services along the corridor beyond the pure infrastructure. This latter point indicates that there may be a possibility of integrating the successor to the Marco Polo programme within the new TEN-T programme.

4.203 Indeed, there is a clear potential complementarity between TEN-T and Marco Polo in the sense that one provides funds for transport infrastructure while the other provides funds for transport services using those infrastructures. In the future, it is possible that the Marco Polo programme could operate within the revised framework of TEN-T, in line with the multi-modal core network and “corridor” approaches. In particular, following designation of the multimodal core network and corridors, it could be publicised that funding is available for switching the carriage of freight from road to alternative modes of transport within the relevant corridor.

4.204 Additional synergies could be exploited for Motorways of the Sea projects since finance for such projects is already available both under the Marco Polo programme and the TEN-T programme. Indeed, Motorways of the Sea is a Priority Project of the TEN-T and there are, quite clearly, synergies that could be exploited in providing funding for projects through just one Executive Agency rather than for two, if the operational structures of the successor to the Marco Polo programme and TEN-T are similar.

4.205 This approach is attractive in the sense that the core network and corridors will include the most important European traffic flows and it is likely that these routes are some of the most congested in Europe at the current time. Therefore, shifting freight off the road on
these routes would, arguably, have a greater positive impact on congestion and the environment than would the provision of funding for modal shift on non-corridor routes.

4.206 The payment structure of the successor to the Marco Polo programme should be revised from its current format. It was demonstrated above that there would be a gain from introducing a staged funding approach since funds would no longer be tied-up for several years and could be quickly put to productive use if modal shift on a certain corridor were to have little success.

Ecobonus

4.207 The Ecobonus programme was initially introduced in Sicily in 2005 by State Law n.11 (5 July 2004). In 2007, the programme was extended to cover the whole of Italy, based on Law 265/2002 which introduced a direct contribution for all transportation companies directly proportional to the compensation of avoided externalities that arise from motorway transportation, relative to the indicated routes. The programme was terminated during 2010 due to budgetary issues.

4.208 Ecobonus pursued a similar objective to the Marco Polo programme, namely to shift road freight transport to the seas. It is important to emphasise that Ecobonus was concerned only with modal shift towards the seas and hence there is no overlap with the Marco Polo programme for actions that involve modal shift to rail and other non-sea shipping modes of transport.

4.209 The annual budget for the Ecobonus programme was greater than the budget available in any year of the Marco Polo programme at €77m per year between 2007 and 2009. As with the Marco Polo programme, the beneficiaries of Ecobonus funds were European transportation companies, partnerships and associations which shift road freight transport onto ships on certain established routes.

4.210 The routes that were permitted under the Ecobonus programme must:

(a) be an alternative to motorway transport;

(b) contribute to the reduction of overall congestion in the national motorway network; and

(c) improve environmental standards relative to the corresponding motorway route.

4.211 The General Manager of the Initiative stated at the SSS and MoS Focal Points Meeting (Brussels, 19 March 2010) that Ecobonus has allowed the promotion of the development of the “Motorways of the sea” system, contributing to a reduction in social costs generated by the national motorway congestion.

4.212 The Ecobonus programme appears to have been relatively successful in attracting applications for funds (approximately 270 applications were received in 2009) and the General Manager considers that:
“there is a realistic hope for this measure to be refinanced in Italy in the next years, in the perspective that the European Commission may consider the possibility of extending it to other E.C. State Members in the medium-long term”.

4.213 There is a clear similarity between the scope and the nature of the Marco Polo and Ecobonus programmes. The General Manager of the Ecobonus programme has suggested that the programme could be rolled out across Europe in the future and it may be possible to do this within a future Marco Polo programme, based on the existing TEN-T framework. This idea was also mentioned by a respondent to our survey in response to a question about how the Marco Polo programme should operate in the future.

**Competitiveness and Innovation Framework Programme (CIP)**

4.214 The Entrepreneurship and Innovation Programme (EIP) and the Intelligent Energy Europe Programme (IEEP) are two of the three specific programmes under the Competitiveness and Innovation Framework Programme (CIP). Both these specific programmes may overlap and have synergies with the Marco Polo programme to some extent (the third specific programme under the CIP concerns Information Communication Technologies and so does not bear any relationship with the Marco Polo programme).

4.215 The main aim of the CIP is “to contribute to the enhancement of competitiveness and innovation capacity in the EU, the advancement of the knowledge society, and sustainable development based on balanced economic growth”. The programme focuses on SMEs in particular.

**Entrepreneurship and Innovation Programme**

4.216 One of the main aims of the EIP is to tackle the problem of limited investment and adoption of environmental technologies and eco-innovation since the environmental costs of polluting technologies and the benefits of resource efficiencies are not taken into account.

4.217 Between 2007 and 2010, €133.8m were allocated to the eco-innovations aspect of the EIP and there is a potential overlap with the aims of the Marco Polo programme in this area. Possibly as a reflection of the complementarity between the Marco Polo programme and certain aspects of the EIP, some aspects of EIP management have been delegated to EACI, including the implementation of the Enterprise Europe Network and the first application and market replication projects of eco-innovation.

4.218 Eco-innovation involves changing consumption and production patterns and market uptake of technologies, products and services to reduce our impact on the environment. Between 2008 and 2013, nearly €200 million is available to fund projects that contribute to eco-innovation in Europe. The aspect of the eco-innovation programme that is most closely related to Marco Polo is “green business”.

4.219 The CIP eco-innovation call for proposals 2010 states that “projects that focus primarily on energy generation and energy efficiency (including projects on energy efficiency in
industry and energy efficiency in transport) are not supported by the Eco-innovation initiative”. This suggests that the eco-innovation and Marco Polo programmes do not provide funds for the same types of projects and hence there are no displacement effects.

4.220 It appears that there are some synergies between the management of the Eco-innovation initiative and the management of Marco Polo. For example, the beneficiaries of both programmes are private companies, a specific contract (the Grant Agreement) is entered into for both programmes and an executive agency (rather than a Directorate General) selects the successful projects. This means that there may be some synergies in terms of reduced costs arising from, for example, marketing and promotional activities (cross-promotion of one programme at events devoted to another, joint promotion in emails to stakeholders etc.).

4.221 The Enterprise Europe Network is the largest network of contact points providing information and advice to EU companies on EU matters, in particular small and medium enterprises (SMEs). The Network is complementary to the other functions of EACI as it can help companies to find partners that may be needed to apply for EU funds, including those of the Marco Polo programme. The network also hosts information on the Marco Polo programme on some of its websites.

Intelligent Energy Europe Programme

4.222 The IEEP is managed by EACI and contributes to the achievement of the EU ‘3 times 20 target’ — i.e. 20 per cent less greenhouse gases, 20 per cent better energy efficiency and a 20 per cent share of renewables. The programme tackles “softer” factors such as removing market barriers, changing behaviour, creating a more favourable business environment for growing energy efficiency and renewables markets, and making EU energy policies better understood in Europe’s communities and regions.

4.223 Between 2007 and 2013 some €730 million are available to fund European projects to promote energy efficiency and renewables, and to set up local or regional energy agencies.

4.224 Energy aspects of transport are included within the programme through STEER actions (which create clean and energy efficient transport) and though integrated initiatives of local energy leadership (which are large-scale networking and capacity building activities). Each of these bears some relation to the aims of the Marco Polo programme.

4.225 Two specific groups of actions are supported under the energy in transport (STEER) section:

(a) energy-efficient transport; and

(b) capacity-building and learning on energy aspects of transport.

4.226 As of December 2010, 53 STEER actions had been financed under the IEEP. A number of these actions bear some resemblance to the common learning action aspect of the
Marco Polo programme since they encourage information sharing and co-operation between those involved in the transport sector and some actions (e.g. the START programme) have involved freight transport. This observation suggests that there may be potential for common learning actions to be included within the IEEP rather than being a separate (and slightly anomalous) category within the Marco Polo programme.

**FP7 Cooperation Work Programme: Transport**

4.227 The FP7 programme will last for seven years from 2007 until 2013 and has a total budget of over €50 billion. Participation in FP7 is open to a wide range of organisations and individuals, including the types of organisations that can apply for Marco Polo funding.

4.228 Based on technological and operational advances and on the European transport policy, the objective of FP7 is to "develop integrated, safer, "greener" and "smarter" pan-European transport systems for the benefit of all citizens and society and climate policy, respecting the environment and natural resources; and securing and further developing the competitiveness attained by the European industries in the global market." 47

4.229 The Sustainable Surface Transport section includes activities that "encourage modal shift and decongesting transport corridors (co-modality)" and hence there is some potential overlap with the Marco Polo programme. Indeed, the title of the section indicates that the FP7 and Marco Polo programmes, in this instance, have a similar goal.

4.230 The "Strengthening Competitiveness" section includes actions in the following areas:

(a) strengthening the European maritime transport sector competitiveness;

(b) exploring and fostering international collaboration in the waterborne transport sector; and

(c) cost-effective improvement of rail transport infrastructure.

4.231 Such investments would appear to be complementary to the Marco Polo programme. For example, cost-effective improvements of rail transport infrastructure might make the operation of freight services a viable option on some railway lines that might not otherwise be possible. This would, hence, lead to an increase in the potential number of additional opportunities that could be exploited by those that operate modally shifted services financed by the Marco Polo programme. A similar observation holds for strengthening the competitiveness of the European maritime transport sector.

4.232 Given bullet point (b) above, there may be a potential overlap between the FP7 programme and the common learning action element of the Marco Polo programme, at

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47 (European Commission C(2010)4900 of 19 July 2010), Work Programme 2011, Cooperation, Theme 7, Transport (Including Aeronautics), Page 8
least insomuch as common learning actions relate to short sea shipping and inland water transport.

**Structural and Cohesion Funds**

4.233 The Structural Funds, comprised of the European Regional Development Fund (ERDF) and the European Social Fund (ESF), and the Cohesion Fund aim to reduce disparities in terms of income, wealth and opportunities between regions within the European Union. The overall budget for the current funding period of 1 January 2007 to 31 December 2013 is €348bn: €278bn for the Structural Funds and €70bn for the Cohesion Fund.

4.234 The cohesion funds provide finance for TEN-T and hence, in principle, are associated with the same complementarities as noted in the TEN-T discussion above.

4.235 There would appear to be little overlap, if any, between the ESF and the Marco Polo programme since the ESF focuses on increasing economic adaptability, employment, equal opportunities and social inclusion.

4.236 There may be some complementarity between the ERDF and the Marco Polo programme since the areas in which these ERDF provides support include the protection and improvement of the environment and cross-border transnational and inter-regional cooperation. Indeed, in the 2006 Regulation relating to the ERDF it is stated under the convergence objective of the fund that this may be achieved in part through:

> “transport investments, including improvement of trans-European networks and links to the TEN-T network; integrated strategies for clean transport which contribute to improving the access to and quality of passenger and goods services, to achieving a more balanced modal split, to promoting intermodal systems and to reducing environmental impacts”

4.237 The regional competitiveness and employment section notes that one focus of ERDF assistance shall be on:

> “strengthening secondary transport networks by improving links to TEN-T networks, regional railway hubs, airports and ports or multimodal platforms, providing radial links to main railway lines and promoting regional and local inland waterways and short-sea shipping.”

4.238 For outermost regions, support is available for freight transport services and start up aid for transport services.

4.239 With regard to the finance of TEN-T networks, the ERDF shares the same complementarities with Marco Polo as discussed in the TEN-T section above. With regard to the promotion of regional and local inland waterways and short-sea shipping

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and improving links to regional railway hubs and ports or multimodal platforms, the ERDF is a complementary policy to Marco Polo as it should help to increase awareness of the possibility of shifting freight off the road and make such actions viable on a greater number of routes. There may be a displacement effect in the outermost regions since ERDF aid (including start up aid) is available for freight transport services and this would presumably encompass aid for modal shift actions.

State Aid

4.240 In 2008, the Commission issued a Communication that provided guidance on State aid complementary to Community funding for the launching of the motorways of the sea. With regard to complementary State aid funding for project approved under the Marco Polo programme the Communication states:50

“on the basis of Article 87(3)(c) of the Treaty, in the absence of Community funding, or to the extent not covered by Community funding, the Commission will authorise State aid to the start-up of Marco Polo II ‘Motorways of the Sea’ projects with a maximum intensity of 35% of operational costs and a maximum duration of five years51. The same will apply to projects selected under Marco Polo II but for which funding is finally provided through the European Regional Development Fund (ERDF)52 or the Cohesion Fund53. Start-up aid to operational costs may not exceed the above-mentioned duration and intensity, irrespective of the source of funding.”

4.241 The Communication thus clearly recognises the complementary role of State Aid and European funding in the context of Motorways of the Sea projects.

4.242 An example of joint funding of this type can be seen in a Motorways of the Sea action that was selected in the 2009 call for proposals. Indeed, in addition to the award of funds by the Marco Polo programme, the Commission approved complementary state aid for the project amounting to €30m where France and Spain will each grant €15 million. The overall financing of the project will be limited to 35 per cent of the eligible costs within the first four years of its operation in line with the applicable EU rules on State aid. The public funding was justified by the Commission partly on the grounds that the competition impact of the project will be limited. The fact that both sources were provided by the Commission and the judgment to allow state funding took into account the funding through the Marco Polo programme implies that there must be no perceived displacement of Marco Polo funds.

50 “Communication from the Commission providing guidance on State aid complementary to Community funding for the launching of the motorways of the sea” (2008/C 317/08) of 12 December 2008
51 It should be noticed that the clause contained in Annex I(2)(b) of the Marco Polo II Regulation (about the limits to funding based on freight actually shifted from road) applies to Community funding, but not to complementary State aid addressed in the present communication.
5 CONCLUSIONS AND RECOMMENDATIONS

5.1 The Marco Polo programmes were set up as a funding instrument addressing market failures in the freight transport sector, which occur at the scale of the EU and beyond. A unique and important feature of the programme is its transparency, the almost numerical precision with which results can be measured and quantified and the direct relationship between EU funding and the results obtained. Furthermore, the devolved management of the programme has strengthened its implementation and allowed the Commission to concentrate on policy issues. However, the programmes have also suffered from a number of flaws inherent in their design, which have come to the surface during the course of their implementation, and particularly so under the strain of the economic crisis.

5.2 The Marco Polo programmes have not fully achieved the goals set to them before coming into being. In particular, there has always been a significant underachievement of modal shift (less than 60 per cent has been achieved in every call) and there is no reason to believe that this will be any different for ongoing projects under Marco Polo II. However, Europe Economics considers that it is important that a successor to the Marco Polo programme is introduced since this is currently the only European financial instrument that focuses on the improvement of environmental efficiency for freight transport, a reduction in greenhouse gas emissions and reduced congestion on European road networks. However, it is acknowledged that this does not necessarily mean that the focus need remain on support to modal shift.

5.3 The overall impact of the Marco Polo programme on the logistics sector is relatively limited. Indeed, the modal shift achieved under Marco Polo I as a whole represents just three per cent of the total volume of international road transport in 2006, the final year of Marco Polo I. This should not be seen just as a reflection of poor programme performance — even if all projects had achieved the forecast modal shift the statistic would still be only six per cent of international road transport in 2006. Hence, the scale of the current programme is as much an explanation for its limited observable impact on international freight transport as is the underachievement of forecast gains.

5.4 Each of the above points suggests that there is a clear argument that modifications to the programme are required if a successor to the programme is to be introduced. In this report, we propose several potentially complementary options that are in line with the

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54 The programme has suffered from lack of uptake by the market. Indeed, only in the early years of Marco Polo was there a significant reserve list of candidate projects and the doubling the funding intensity has only partly managed to remediate the problem. Furthermore, the programme, with its very prescriptive rules, has proven to be inflexible and incapable of adapting to new challenges raised for instance by the economic crisis. The focus on support for start-up of new transport services or significant upgrades of existing ones makes the programme prone to potential problems of distortion of competition even if there are safeguards established in order to avoid a degree of distortion which goes against the common interest.
broad aims of the new White Paper to establish a single transport area, promote technological development and invest in the multi-modal transport network.\(^{55}\)

**Alternative ways of promoting modal shift**

5.5 One possibility for the future of the Marco Polo programme would be to continue with the approach of encouraging modal shift towards non-road freight transport but to revise the specific details of how this objective is achieved.

5.6 For instance, funding could be provided to compensate road transporters for shifting cargo onto non-road transport modes rather than providing funding to the operators of non-road transport modes. This may help to alleviate some of the concerns expressed in survey and interview responses as regards distortion of competition, as not the operators but the users of transport are receiving financing.

5.7 One possibility for alternative implementation would be through the Member States rather than providing subsidies directly to private companies. In particular, the aid given to the road transport companies could be based on a public intervention in the form of partial reimbursement of invoices for alternative methods to road transport, irrespective of whether or not the logistics chain was using the alternative transportation means beforehand. Another possibility of implementation is through an electronic pass which could record the voyages made on more environmentally friendly transport modes.

5.8 However, before introducing such a scheme, Europe Economics advises to analyse in further detail a number of issues of potential concern, such as the impact on bureaucratic burden, the efficiency and leverage of the scheme compared to the Marco Polo programme, the impact on the transport market, the potential legacy of such a scheme, the issue of distortion of competition between corridors and the mechanisms to be put in place to safeguard the taxpayers' interests.

**From modal shift to direct promotion of innovation, efficiency and sustainability**

5.9 A second option for the future of the Marco Polo programme would be to change the focus from modal shift to an alternative approach to achieving the broad goals of creating a sustainable transport system and, in particular, reducing the environmental cost resulting from the movement of freight across the EU and to close third countries.

5.10 Such an approach could consist of targeting EU support to investments and actions which lower the emissions of CO\(_2\) of freight transport (and associated other external costs), thereby directly contributing to the objectives of the EU 2020 Strategy. This policy could, for example, compensate undertakings for improving the energy efficiency of the transport

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\(^{55}\) WHITE PAPER, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system; COM(2011) 144 final
unit, even without changing transport mode (e.g. by switching from a high-emission vessel to a low emission vessel).

5.11 This approach should encompass the identification of investment opportunities and actions that merit EU funding support. Such assessment should be conducted in close partnership with the sector and be sufficiently flexible so as to seize the opportunity of new technological developments as they arise.

5.12 Such a programme structure would more directly target the aims of the programme (i.e. to improve energy efficiency and sustainability of freight transport) and it is possible that funding conditions could be simplified. In particular, this programme structure could be implemented through offering part-finance for the purchase of cleaner vessels, trucks etc. and hence would be a one-off payment to companies rather than ongoing support and monitoring over a number of years. This would make the operational management of the programme far simpler than at present.

5.13 Another advantage of this policy option would be that the programme would become more attractive to insular and archipelagic Member States than it is at present. Such states currently have some limited opportunities to benefit from the programme because of the limited possibility of achieving modal shift / traffic avoidance within their geographical boundaries. If the successor to the Marco Polo programme were to compensate for switching to more energy-efficient modes of transport it would become more attractive for the insular and archipelagic Member States to participate in the programme.

Expanding the scope of the programme

5.14 Several options exist for expanding the scope of the programme beyond its current focus on modal shift for international freight transport. One possibility would be for the successor to the Marco Polo programme to incorporate a specific type of action to support sustainable urban freight and logistics. For example, an action to support companies in switching from petrol to electric trucks for urban road transport and logistics could be defined. Another possibility would be to support multimodality in long-distance passenger transport in addition to long-distance freight transport.

5.15 A detailed analysis of the potential overlap of the successor to the Marco Polo programme with existing programmes would need to be undertaken in the event that the scope of the programme were to be expanded. It should be noted that this is a general comment and is not restricted to the specific suggestions of the previous paragraph.

Expand the range of support instruments

5.16 The Marco Polo programme provides grants as a support for the start-up of actions directed to shifting freight transport off the road.

5.17 There are alternative ways of providing financial support, and these should be investigated further with respect to their strengths and weaknesses for each of the actions
and objectives envisaged. For example, the successor of Marco Polo could take the form of other financial instruments such as loans, subsidised loans or guarantees, which would help finance the needed investments.

5.18 There are several potential advantages of changing the support instrument. Most clearly, the new support scheme could be designed in a way that would allow flexibility in redirecting the funds to alternative projects with similar objectives. This would make it particularly interesting in situations with changing market conditions. Loans could be also used as revolving fund if the repayment of the loan and interest are used to replenish the fund for further loans. This could increase the access to finance for SMEs' transport operations and would also benefit from associating financing institutions' expertise for assessing investment opportunities. Finally, loans could also be designed so as to reduce the administrative burden and the costs of monitoring of achieved results, and could potentially benefit from synergies or programmes from other institutions such as the European Investment Bank or the European Investment Fund. Nevertheless, this type of intervention could potentially interfere in the level playing field of operators and, similarly to the current Marco Polo, should be designed in order to avoid undue distortion of competition.

**Improve synergies with the new TEN-T policy options**

5.19 In the future, the successor to the Marco Polo programme could potentially operate within the revised framework of TEN-T, within the framework of a broader coherent multi-modal TEN-T network which is implemented through “corridor” approaches. In particular, following designation of the multimodal core network, coordination and promotion of funding support could take place within the context of the TEN-T implementation, ensuring that synergies are exploited between infrastructure funding priorities and support to making the use of infrastructure more sustainable.

5.20 As for the introduction of a modal shift compensation approach, the identification of supported corridors would under this option be made consistent with the corridors identified under the TEN-T policy. With this joined-up approach of providing finance to transport infrastructure and service along the main corridors, both infrastructure and transport operations could obtain finance from the more broadly defined TEN-T programme.

5.21 This approach is attractive in the sense that the core network and corridors will include the most important European traffic flows and it is likely that these routes are some of the most congested in Europe at the current time and generate the highest external costs. Therefore, focussing the implementation of the instrument on these routes would, arguably, have a greater positive impact on congestion and the environment and on the overall efficiency of the instrument.

5.22 As for the direct promotion of energy efficiency and sustainability option, again, it would be possible to incorporate this policy option within the revised TEN-T framework such that promotion and support for implementation of the funding instrument would be coordinated
in the framework of the TEN-T policy, even if the instrument as such should be more widely applicable than for transport on TEN-T links and nodes only.

**Funding structure and evaluation**

5.23 Irrespective of the particular approach taken by the successor to the Marco Polo programme, the funding model should be amended from its current structure. In particular, we consider that adopting a ‘staged’ funding approach would help to avoid outcomes of significant committed but non-allocated European funds. Indeed, TEN-T EA currently allocates funds for TEN-T using an instalment approach, such that it is not necessary to commit all funding for a project at the very beginning. This mechanism allows for recycling a substantial proportion of funds to new calls for proposals when needed and for an ultimately more productive use of European funds.

**Potential for complementary State aid**

5.24 In the context of the current Marco Polo programme, the complementary role of State Aid and European funding in the context of Motorways of the Sea projects has been recognised in a 2008 Communication from the Commission. Europe Economics considers that state aid may also play a complementary role under the successor to the Marco Polo programme. Nonetheless, each request for complementary State and European funding must be assessed in detail to ensure that no relevant competition issues are present.

5.25 There would be benefit in thinking about the specific approach with which the successor to the Marco Polo programme could be linked with State aid. At present, the process for linking State aid to Marco Polo is very complex, difficult to coordinate and has lead to a long decision-making process. This may be one reason for the fact that only one Marco Polo project has taken advantage of this possibility at mid-December 2010. Simplifying the process should encourage greater exploitation of joint funding possibilities in the future. It might also be useful to consider the establishment of complementary State aid schemes rather than providing opportunities for the use of State aid notifications to support individual services.

**Common learning actions**

5.26 A further element of the redesign of the programme might be to remove the possibility for funding of common learning actions under the Marco Polo programme. Support for similar action types is currently available through the FP7 programme (at least insomuch as the actions relate to short sea shipping and inland waterway transport) and the Intelligent Energy in Europe Programme. Common learning actions would seem to fit more naturally into these programmes than they would into a successor to the Marco Polo programme based on any of the policy options outlined above.

5.27 The rationale for this thought is that the successor of the Marco Polo programme would be based on observable changes in transport mode or in the energy efficiency of transport units within mode. Common learning actions do not have such easily
Conclusions and Recommendations

Observe outcomes and appear to have had limited real impact at mid-December 2010 on decisions relating to international freight transport. By bringing the common learning actions element of the programme within the structure of a programme that has greater focus on learning and behavioural change than would the successor to the Marco Polo programme, it is possible that the expertise of those running such programmes could be utilised to improve the effectiveness of learning actions that involve freight transport.

Issues with the proposed approaches

5.28 The risk of fraud is an issue common all the approaches outlined above. Appropriate safeguards should be introduced at national and European level to limit the potential for fraud.

5.29 It would also be necessary to evaluate the potential benefits and risks associated with delegating responsibility for programme management and implementation to Member States. On the one hand, Member States have experience of administering the TEN-T programme and hence, if the Marco Polo programme were to be aligned with this framework, there may be economies of scope to be exploited. On the other hand, the Marco Polo programme is of relatively small scale and hence it is not certain that the cost of establishing complex management structures at national level would be justified for a programme of this scale. These issues should be thoroughly evaluated before any decisions are taken.

5.30 For both of the approaches proposed above, the likely administrative burden must be considered. While it is not within the scope of this evaluation to attempt to quantify the value of the administrative burden of each approach, a qualitative assessment is possible. Indeed, we would expect the administrative burden to be greater if the successor to the Marco Polo programme did not restrict funding to projects along the core network and corridors of the new TEN-T programme.

5.31 If it were to be the responsibility of Member States to implement the programme, we would expect these additional costs to fall largely on Member States rather than the Commission. The administrative burden would result from the fact that more time would be required to assess and manage projects along many different routes than would be required to assess and manage the same number of projects along a smaller number of routes. Within this framework, the administrative burden to the Commission would differ little between these options since its role as communicator with Member States and to financier would be little affected by the specifics of project award rules.

5.32 A significant issue with all the options for the successor of the Marco Polo programme is deadweight. Indeed, within each approach there is a risk that European funds would be used to compensate actions that would have gone ahead even in the absence of public funding such that the added value of the programme would be nil. As it is not within scope to attempt to quantify deadweight at this time, we merely emphasise that a thorough cost benefit analysis of the proposed options for the successor of the Marco
Polo programme should be undertaken prior to its introduction and should incorporate the deadweight issue.
APPENDIX 1: SURVEY QUESTIONNAIRES

A1.1 Europe Economics has been engaged by DG MOVE of the European Commission to conduct an evaluation of the Marco Polo programme. At the same time, the Centre for Strategy and Evaluation Services (CSES) has been commissioned to conduct an evaluation of the Executive Agency for Competitiveness and Innovation (EACI), which includes the unit managing the Marco Polo programme.

A1.2 This survey is distributed by CSES and Europe Economics to gather information that is required for their respective evaluations. The survey should not take too much of your time to complete and we hope that it will be possible for you to find time to help Europe Economics and CSES in their work. Your input would be greatly appreciated and will have an impact on the future structure and running of the Marco Polo programme.

A1.3 Thank you in advance for your response.

1 Please complete the following information.

<table>
<thead>
<tr>
<th>Organisation Name</th>
<th></th>
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<tbody>
<tr>
<td>Contact Person name</td>
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<tr>
<td>Contact email address</td>
<td></td>
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<tr>
<td>Contact telephone number</td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td></td>
</tr>
</tbody>
</table>
| Type of undertaking – please delete as applicable | SME
Non-SME |

2 Did you apply for funding under the Marco Polo programme? Select all that apply.

- [ ] Yes I was **successful** in Marco Polo I  (Go to Section A)
- [ ] Yes, I was **successful** in Marco Polo II  (Go to Section A)
- [ ] Yes but I was **unsuccessful** in Marco Polo I  (Go to Section B)
- [ ] Yes but I was **unsuccessful** in Marco Polo II  (Go to Section B)
- [ ] No  (Go to Section C)

**Section A: Successful Applicants Survey**

1 What was your role in the project? Please describe.
Survey Questionnaires

Call and selection (process)

2 How did you hear about the Marco Polo programme?
   □ We had applied for it in the past
   □ Through a specific event or contact. Please specify _______________________

3 Was the project idea generated so as to secure funding from the Marco Polo programme or did the idea already exist before you heard about the programme?
   □ Idea was generated because of the Marco Polo programme
   □ Idea already existed before the programme was heard about

4 Would the project still have been initiated if you had not received funding from the Marco Polo Programme?
   □ Yes
   □ No
   □ Unsure

5 Did the project receive any other European Commission funding or funding from any public sector sources?
   □ Yes. Please specify _______________________
   □ No

6 How do you judge the height of the costs put on the project because of the administrative and procedural requirements of the MP Programme?
   □ Low (1% of grant received from Marco Polo programme)
   □ Middle (5% of grant received from Marco Polo programme)
   □ High (10% of grant received from Marco Polo programme)
   □ Other. Please specify _______________________

7 Did you have any trouble writing certain elements of the proposal? Select all that apply.
   □ Quantity of freight shifted off the road or quantity of road traffic avoided
   □ Environmental benefits and external costs savings
   □ Viability of action
Distortion of Competition

European added value – improvement of co-operation, sharing of know-how

Innovative approach

Dissemination strategy

Credibility of action

Degree of intermodal integration

8. Was the original project idea changed because of the specific requirements in the Call for proposals?
   □ Yes. Please specify
   □ No

9. Was it clear to you based on which criteria your proposal would be evaluated?
   □ Yes
   □ No

10. Did you use consultants to aid you in the production of your proposal?
    □ Yes
    □ No

11. Do you feel that using the consultants positively affected the success of the project?
    □ Yes
    □ No

12. What was the cost of using consultants as a percentage of the funding requested from the Marco Polo programme?
    □ Low (1% of grant received from Marco Polo programme)
    □ Middle (5% of grant received from Marco Polo programme)
    □ High (10% of grant received from Marco Polo programme)
    □ Other. Please specify
**Effectiveness and efficiency of project**

13 What are the main factors contributing to the success / failure of this project?

<table>
<thead>
<tr>
<th>Low</th>
<th>Mid</th>
<th>High</th>
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<tbody>
<tr>
<td>Economic conditions helped project</td>
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<td></td>
</tr>
<tr>
<td>Economic conditions hindered project</td>
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<td></td>
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<tr>
<td>Difficulty convincing clients to switch to an alternate mode of transport</td>
<td></td>
<td></td>
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<tr>
<td>Marco Polo funding gave credibility to project</td>
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<tr>
<td>Marco Polo funding increased publicity of the project</td>
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<tr>
<td>Action by other entities to improve infrastructure in reaction to the project</td>
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<tr>
<td>Lower demand than anticipated</td>
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<td></td>
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<tr>
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<tr>
<td>Administrative and reporting requirements</td>
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<td>Defensive reaction from road haulage firms in lowering prices</td>
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<tr>
<td>Legal difficulties</td>
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<td></td>
</tr>
<tr>
<td>Marco Polo funding encouraged increased cooperation between firms</td>
<td></td>
<td></td>
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<tr>
<td>Project was unable to overcome structural barriers</td>
<td></td>
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<tr>
<td>Project lead to the generation of innovative ideas</td>
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<tr>
<td>Project lead to the implementation of innovative ideas</td>
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<td>Project lead to an increased sharing of knowledge (between organisations and Member States)</td>
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<tr>
<td>Other (please specify)</td>
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<td></td>
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</table>

14 Do you feel that your project has had any environmental impacts (positive or negative) other than from a reduction in road haulage?

- [ ] Yes. Please specify
- [ ] No

15 Do you feel that your project has had any impacts (positive or negative) other than modal shift and environmental benefits?

- [ ] Yes. Please specify
- [ ] No

16 How many jobs has this project created, if any?
Legacy

17  Will (did) the services initiated by the project continue after MP funding is (was) no longer available?

□  Yes

□  No. Project no longer financially viable

□  No. Higher business opportunities available elsewhere without aid of the subsidy

□  No. Transport mode no longer appropriate given changes in transport routes

□  No. Other. Please specify ___________________________________________________________________________ 

18  If the service will (did) remain operational, will (did) it change in nature once it is (was) no longer part of the Marco Polo programme?

□  No

□  Yes. Increased reliance on road transportation

□  Yes. Change in location of market means change in the route

□  Yes. Change in location of market means route no longer useable

□  Yes. Other. Please specify ___________________________________________________________________________

Impacts of programme

19  Do you feel that the Marco Polo programme has any adverse impacts in the following areas:

□  Competition within the logistics/transport market.

□  Increased congestion on waterways

□  Increased congestion on seas

□  Increased congestion on railways
Increased pollution of seas/waterways

Please elaborate:

Do you feel that the Marco Polo programme was difficult to access for SMEs?

- Yes. Please describe why.
- No

Role of the EACI

Are you aware that the EACI is the body administering the Marco Polo programme on behalf of the Commission?

- Yes
- No
- Vaguely

Please comment on how well the EACI (Executive Agency for Competitiveness and Innovation) handled your project. The EACI administers the Marco Polo programme on behalf of the Commission.

<table>
<thead>
<tr>
<th>Aspects of Programme management</th>
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<th>Good</th>
<th>Neutral</th>
<th>Poor</th>
<th>Very poor</th>
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<tr>
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<td>Application procedures and timescales</td>
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<tr>
<td>Time taken to assess applications and make awards</td>
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<tr>
<td>Overall EACI role</td>
<td></td>
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</tbody>
</table>

Please use the space below to elaborate on your responses and/or to comment on any other aspects (positive or negative) of the role of the EACI in your project:
23 Overall, what is your view of how the EACI has handled the administration of your project?

<table>
<thead>
<tr>
<th>Strongly dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Highly satisfied</th>
</tr>
</thead>
</table>

24 Were you satisfied with the Marco Polo programme?

- Yes
- No

25 Do you have any suggestions for changing or improving the Marco Polo programme? Please describe.

Section B: Unsuccessful Applicants Survey

1 How did you hear about the Marco Polo programme?

- We had applied for it in the past
- Through a specific event or contact. Please specify

2 Did you find the programme easy to access (find and complete the application forms)?

- Yes
- No (Please use the space below to explain why not)

3 Please use the space below to comment on any other aspects of the application procedure and role of the EACI:

4 Do you feel that the Commission conducted a thorough and objective review of your funding application?

- Yes
Survey Questionnaires

5 We are aware that the Commission provides feedback to unsuccessful applicants for Marco Polo funding. Do you feel that this feedback clearly explains why your application was unsuccessful?

☐ Yes
☐ No. Please describe how the feedback could be improved.

6 Are you considering re-applying for Marco Polo funding?

☐ Yes
☐ No
☐ Possibly

7 Has the project gone ahead without Marco Polo funding?

☐ Yes
☐ No

8 If yes, was the project amended from that submitted to the Commission?

☐ Yes. Please describe.
☐ No

9 Did the project receive any other European Commission funding or funding from any public sector sources?

☐ Yes. Please specify
☐ No

Impacts of programme

10 Do you feel that the Marco Polo programme has any adverse impacts in the following areas:

☐ Competition within the logistics/transport market
☐ Increased congestion on waterways
Survey Questionnaires

- Increased congestion on seas
- Increased congestion on railways
- Increased pollution of seas/waterways

Please elaborate:

Section C: Non-applicants Survey

1. How did you hear about the Marco Polo programme?
   - We had applied for it in the past
   - Through a specific event or contact. Please specify

2. Did you consider applying for funding under either Marco Polo I and/or Marco Polo II? (tick all that are relevant)
   - Marco Polo I
   - Marco Polo II

3. Are you considering applying for Marco Polo funding in the future?
   - Yes
   - No

4. For Marco Polo I: If you considered applying, please specify the reason(s) that you ultimately chose not to apply.
   - Insufficient information available on application procedure
   - Application procedure too complex
   - Application procedure too time consuming and/or costly
   - Lack of partners for application
   - Unable to identify specific project suitable for funding
Other, please specify:

For Marco Polo II: If you considered applying, please specify the reason(s) that you ultimately chose not to apply.

- Insufficient information available on application procedure
- Application procedure too complex
- Application procedure too time consuming and/or costly
- Lack of partners for application
- Unable to identify specific project suitable for funding

Other, please specify:

Impacts of programme

Do you feel that the Marco Polo programme has any adverse impacts in the following areas:

- Competition within the logistics/transport market
- Increased congestion on waterways
- Increased congestion on seas
- Increased congestion on railways
- Increased pollution of seas/waterways

Other, please specify:
APPENDIX 2: INTERVIEW TEMPLATES

Interview Guide for Successful Applicants

Call for Proposals

1  Did you have any trouble understanding the Call for proposals? If so, which elements were unclear?

2  Did you use consultants to aid you in the production of your proposal? How did they improve your initial proposal/idea? How much do you think this impacted your chance of success?

Effectiveness

3  Will the project (likely) realise its intended shift of road-freight to alternative modes of transport? If not, what are the causes for this?

4  Have any adjustments been made to the project idea (in the contract) during the implementation of the project? If so, what adjustment and because of what reasons?

Efficiency

5  Compared to the original cost planning in the proposal, are the costs in reality higher or lower? What are the causes of the difference?

6  How much private investment has the project generated? Is this more or less than expected?

Environment

7  Will the project (likely) realise its intended environmental benefits? If not, what are the causes for this?

Market conditions

8  [For catalyst actions only] Will the project overcome any structural market barriers? If so, which barriers and how are these overcome?

9  Will the project (likely) contribute to the generation of new forms of cooperation?

10 Will the project (likely) contribute to innovation? If so, please describe.

11 [For common learning actions only] Will the project (likely) contribute to the sharing of knowledge between organisations?

12 Do you believe that the Marco Polo programme can lead to a distortion of competition within markets? If so, in what sense?
13 Do you believe that the Marco Polo programme is still necessary (e.g. is there still a need for programme to provide start-up aid)?

Legacy (qualitative)

14 Do you expect the services initiated by the project will remain operational after the completion of the project? If not, why will it not remain operational?

15 If so, will the service change when it is no longer part of the Marco Polo Programme? If so, what do you expect will be the change?

Management (project level)

16 What are the responsibilities of each of the project partners? How are they involved in the management and monitoring of the project?

17 How do you judge the quality of the management and monitoring of the project?

18 How was the communication between the project partners organised? What has been the quality of the communication between the project partners?

Management (programme level)

19 How did EACI monitor the project? Did they request reports? Did they conduct field visits? Did they ask questions?

20 Did EACI make any remarks about the progress of the project? If so, can you shortly describe the content of these remarks? Did you agree with these remarks? Have the remarks let to changes in the project planning, management or monitoring?

21 How often did you communicate with EACI about the project? Which methods were used to communicate with EACI? (E-mail, Phone, Reports, etc)

22 Did you ask EACI for advice? If so, on what subject and what was the advice? Could you use the advice to advance the progress of the project?

23 Overall, what is the quality of the communication with EACI?

Impact of regulation

24 Do you think the following changes may have had an impact on the participation in the programme and/or on the success (efficiency) of the programme?

(Note that each of the items listed below would be explained to interviewees on the basis of the description of changes contained in the Marco Polo Internal Vademecum)

- Lower thresholds
Interview Guide for Unsuccessful Applicants

1. Did you have any trouble understanding the Call for proposals? If so, which elements were unclear?

2. Did you use consultants to aid you in the production of your proposal? How did they improve your initial proposal/idea? How much do you think this impacted your chance of success?

3. Do you believe that the Marco Polo programme can lead to a distortion of competition within markets? If so, in what sense?

4. Do you believe that the Marco Polo programme is still necessary (e.g. is there still a need for programme to provide start-up aid)?

5. Do you think the following changes may have had an impact on the participation in the programme and/or on the success (efficiency) of the programme?

(Note that each of the items listed below would be explained to interviewees on the basis of the description of changes contained in the Marco Polo Internal Vademecum)

- Lower thresholds
- Minimum duration of contracts and possibility to extend contracts
- New definition of freight
- Possibility of applications by single undertakings
- Financing of ancillary infrastructure

Interview Guide for Non-Applicants

1. Did you consider applying for funding under either Marco Polo I and/or Marco Polo II?

2. Are you considering applying for Marco Polo funding in the future?

□ Yes
□ No
3 If you considered applying, please explain the reason(s) that you ultimately chose not to apply.

4 Do you believe that the Marco Polo programme can lead to a distortion of competition within markets? If so, in what sense?

5 Do you believe that the Marco Polo programme is still necessary (e.g. is there still a need for programme to provide start-up aid)?
APPENDIX 3: ANALYSIS OF SURVEY RESPONSES

A3.1 This chapter provides an analysis of responses obtained from market participants. In total 80 companies participated in the survey, 15 of them only partially.

A3.2 The first section of this chapter investigates companies that were successful when applying for either Marco Polo I (7 companies) or Marco Polo II (34 companies). The second section investigates companies that were not successful when applying for Marco Polo programs (12 companies). The third section summarises answers from the companies that did not apply for either Marco Polo programme (around 30 companies).

A3.3 In all cases, the vertical axis of the charts below show the number of respondents.

Successful Applicants Survey

Call and selection (process)

Question 4: How did you hear about the Marco Polo programme?

A3.4 Past experience with the Marco Polo programme of course played an important role, especially for applicants under Marco Polo II. For those applying to Marco Polo for the first time, many had heard about the programme from the internet, through their partners and suppliers or during a conference/workshop.

![Figure A3.1: Question 4](image)

**Figure A3.1: Question 4**

Question 5: Was the project idea generated so as to secure funding from the Marco Polo programme or did the idea already exist before you heard about the programme?

A3.5 The answers clearly show that the majority of ideas would have been in existence in the absence of the Marco Polo programme and only two ideas were generated as a response to the availability of funding from the Marco Polo programme.
Question 6: Would the project still have been initiated if you had not received funding from the Marco Polo Programme?

A3.6 More than a half of the projects would, or may have, have been initiated even without the Marco Polo programmes. Forty two per cent of projects would certainly have gone ahead without funding from the Marco Polo programme, a proportion which may seem rather high. As one market participant suggested, this result may be due to the fact that the grant received from the Marco Polo programme must be returned if the project fails — projects are paid on performance. Therefore, it may be that only projects that could work without a grant participated in the programme.

Figure A3.3: Question 6
Analysis of Survey Responses

Question 7: Did the project receive any other European Commission funding or funding from any public sector sources?

A3.7 Except for one national/regional subsidy, none of the projects received any additional funding.

**Figure A3.4: Question 7**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
</tr>
</tbody>
</table>

Question 8: How do you judge the height of the costs put on the project because of the administrative and procedural requirements of the MP Programme?

A3.8 Figure A3.5 indicates that costs related to the administrative requirements of Marco Polo represent about 5 per cent of the total received grant for majority of the companies. Costs as a percentage of the grant received are usually greater for smaller projects, which is understandable since the administrative requirements are similar for all projects. A few companies mentioned that the recent economic crisis increased costs because of lower volumes.
Figure A3.5: Question 8

Question 9: Did you have any trouble writing certain elements of the proposal? Select all that apply.

A3.9 At least one option was selected by 30 companies. Of these companies, almost 45 per cent selected environmental benefits and external costs savings as the hardest element of the proposal. Distortion of competition, as the second hardest element, was selected by over 35 per cent of the respondents.

Table A3.1: Question 9

| Environmental benefits and external costs savings | 13 |
| Distortion of Competition | 11 |
| Quantity of freight shifted off the road | 8 |
| Viability of action | 5 |
| Innovative approach | 4 |
| Credibility of action | 4 |
| Degree of intermodal integration | 3 |
| European added value – improvement of co-operation, sharing of know-how | 2 |
| Dissemination strategy | 1 |

Question 10: Was the original project idea changed because of the specific requirements in the call for proposals?

A3.10 Very few companies had to change the original project idea because of the specific requirements. Where changes were made, they were mainly caused by the obligation to have a partner within the consortium or because of the specific criteria for consortium selection.
Analysis of Survey Responses

Figure A3.6: Question 10

![Bar chart showing the responses to Question 10]

Question 11: Was it clear to you based on which criteria your proposal would be evaluated?

A3.11 Figure A3.7 indicates that for vast majority of companies, the criteria of the proposals evaluation were clear.

Figure A3.7: Question 11

![Bar chart showing the responses to Question 11]

Question 12: Did you use consultants to aid you in the production of your proposal?

A3.12 Almost 80 per cent of companies that received grants had used consultants to help them with their proposals.
**Question 13:** Do you feel that using the consultants positively affected the success of the project?

A3.13 Over 70 per cent of companies that used consultants believe that their help positively affected the success of the project.

**Question 14:** What was the cost of using consultants as a percentage of the funding requested from the Marco Polo programme?

A3.14 The cost of consultants varies across companies. While the majority of respondents fall into the low or the middle category, a few companies reported very high costs of up to 25 per cent of the total grant. However, these high proportions of cost are usually observed for projects that received a relatively small grant.
Effectiveness and efficiency of project

Question 15: What are the main factors contributing to the success / failure of this project?

A3.15 The two most cited negative factors (worse economic conditions and lower demand) can be, at least partially, attributed to the overall downturn of the economy. The economic crisis that has occurred during the Marco Polo II funding period, therefore, seems to be an important factor that contributed to the failure of some of the projects.

A3.16 On the other hand, the projects helped to generate and introduce innovative ideas which contributed to the success of these projects. Increased publicity and credibility related to the Marco Polo funding seemed to have an important positive impact as well.
Table A3.2: Question 15

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic conditions hindered project</td>
<td>7</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Project lead to the implementation of innovative ideas</td>
<td>4</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Project lead to the generation of innovative ideas</td>
<td>3</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Lower demand than anticipated</td>
<td>5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Marco Polo funding gave credibility to project</td>
<td>5</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Marco Polo funding increased publicity of the project</td>
<td>10</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Defensive reaction from road haulage firms in lowering prices</td>
<td>12</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Project lead to an increased sharing of knowledge</td>
<td>11</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Difficulty convincing clients to switch to an alternate mode of transport</td>
<td>5</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Marco Polo funding encouraged increased cooperation between firms</td>
<td>11</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Administrative and reporting requirements</td>
<td>11</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Economic conditions helped project</td>
<td>18</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Higher demand than anticipated</td>
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<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Legal difficulties</td>
<td>18</td>
<td>12</td>
<td>2</td>
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<tr>
<td>Action by other entities to improve infrastructure in reaction to the project</td>
<td>21</td>
<td>7</td>
<td>2</td>
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<tr>
<td>Project was unable to overcome structural barriers</td>
<td>15</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

**Question 16:** Do you feel that your project has had any environmental impacts (positive or negative) other than from a reduction in road haulage?

A3.17 The majority of respondents stated that their project had created additional positive environmental impacts. While some of the specified benefits appear to have arisen as a direct consequence of modal shift, some benefits clearly are additional.

A3.18 For example, one respondent stated that during the course of the project there had been an opportunity to optimise fuel consumption in the vessels while another stated that they had optimised cargo storage capacity.

A3.19 One respondent stated that knowledge spillovers and useful contacts obtained through the Marco Polo programme will create additional positive environmental impacts in the future as they continue to work on modal shift projects.
Figure A3.11: Question 16

Figure A3.12: Question 17

**Question 17**: Do you feel that your project has had any impacts (positive or negative) other than modal shift and environmental benefits?

A3.20 Only positive impacts are mentioned by the respondents, such as new business opportunities, transfer of know-how or various other impacts that either positively affected projects within the company, or the whole market. For example, one respondent stated that the aggregation of shuttle trains allowed freight to be diverted from roads for destinations that were not originally included in the project.
Question 18: How many jobs has this project created, if any?

A3.21 In total, the number of jobs that are stated to have been created by the Marco Polo programme is 295, including only those projects that were operated by survey respondents. It should be also noted that additional jobs could have been created indirectly in other participating companies, these are not included. Equally, however, there may have been job losses in other industries as employment was displaced away from the road haulage industry towards the modally shifted industry.

Figure A3.13: Question 18

![Bar chart showing job creation distribution](chart.png)

Legacy

Question 19: Will (did) the services initiated by the project continue after MP funding is (was) no longer available?

A3.22 A few projects were/will not be viable without the public support; however the majority of respondents stated that their project would survive without Marco Polo programme funding. As discussed in the main text of this report, there are issues of existence bias and response bias associated with the reported findings of this question.

Table A3.3: Question 19

| Yes                              | 23 |
| No. Project no longer financially viable | 4  |
| No. Higher business opportunities available elsewhere without aid of the subsidy | 0  |
| No. Transport mode no longer appropriate given changes in transport routes | 0  |
| No. Other                        | 5  |
Analysis of Survey Responses

**Question 20:** If the service will (did) remain operational, will (did) it change in nature once it is (was) no longer part of the Marco Polo programme?

A3.23 In general, only the change in location of the market will/did affect the nature of a few projects; the rest will/did remain unchanged.

<table>
<thead>
<tr>
<th>Table A3.4: Question 20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>Yes.</strong> Change in location of market means change in the route</td>
</tr>
<tr>
<td><strong>Yes.</strong> Increased reliance on road transportation</td>
</tr>
<tr>
<td><strong>Yes.</strong> Change in location of market means route no longer useable</td>
</tr>
<tr>
<td><strong>Yes.</strong> Other</td>
</tr>
</tbody>
</table>

**Impacts of programme**

**Question 21:** Do you feel that the Marco Polo programme has any adverse impacts in the following areas:

A3.24 Table A3.5 indicates that many companies did not select any option suggesting that the majority of recipients of Marco Polo funds do not see many adverse effects caused by the Marco Polo programme.

<table>
<thead>
<tr>
<th>Table A3.5: Question 21</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competition within the logistics/transport market</strong></td>
</tr>
<tr>
<td><strong>Increased congestion on railways</strong></td>
</tr>
<tr>
<td><strong>Increased pollution of seas/waterways</strong></td>
</tr>
<tr>
<td><strong>Increased congestion on waterways</strong></td>
</tr>
<tr>
<td><strong>Increased congestion on seas</strong></td>
</tr>
</tbody>
</table>

**Question 22:** Do you feel that the Marco Polo programme was difficult to access for SMEs?

A3.25 The most cited difficulties of access for SMEs mainly include heavy and too complicated administration. It was noted that without the help of consultants the application would be too time consuming. On the other hand, one respondent stated that although the process may seem fairly complicated for some companies, in their view it is getting better every year.
Figure A3.14: Question 22

Figure A3.15: Question 23

Role of the EACI

Question 23: Are you aware that the EACI is the body administering the Marco Polo programme on behalf of the Commission?

A3.26 Clearly, except for one company, all market participants are fully aware of the EACI and its role.
Question 24: Please comment on how well the EACI handled your project.

A3.27 There does not seem to be any pattern in the replies. Time taken to assess the applications received slightly higher number of very poor replies but, apart from that, the replies are scattered across the options without any outliers.

A3.28 Overall, the EACI is considered to be good on average with only two companies thinking it to be poor.

A3.29 In the comments, companies generally expressed positive feedback on the role of EACI mentioning the professional handling of the questions, approachable staff or good support and guidance. However, some companies complained that EACI is focused too much on the grant agreement and argued that EACI should be more flexible when it comes to amendments to the contract required by the market needs, such as changes in routes etc.

Table A3.6: Question 24

<table>
<thead>
<tr>
<th></th>
<th>Very good</th>
<th>Good</th>
<th>Neutral</th>
<th>Poor</th>
<th>Very poor</th>
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<tbody>
<tr>
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<td>10</td>
<td>7</td>
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<tr>
<td>Monitoring arrangements and procedures</td>
<td>5</td>
<td>12</td>
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<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Application procedures and timescales</td>
<td>4</td>
<td>13</td>
<td>9</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Requirements regarding activity and final report</td>
<td>3</td>
<td>12</td>
<td>9</td>
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<td>0</td>
</tr>
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<td>Time taken to process requests for payment</td>
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<tr>
<td>Aspects of Programme management</td>
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<tr>
<td>Responsiveness of EACI to requests for information</td>
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<td>17</td>
<td>4</td>
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<td>0</td>
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<tr>
<td>Overall EACI role</td>
<td>6</td>
<td>17</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Question 25: Overall, what is your view of how the EACI has handled the administration of your project?

A3.30 As noted earlier, companies are generally satisfied with how the EACI handled the administration. Therefore, only two companies were dissatisfied, one strongly.
Figure A3.16: Question 25

Question 26: Were you satisfied with the Marco Polo programme?

A3.31 Again, the majority of companies (over 85 per cent) were satisfied with the Marco Polo programme.

Figure A3.17: Question 26
**Question 27:** Do you have any suggestions for changing or improving the Marco Polo programme? Please describe.

A3.32 Companies often mentioned that Marco Polo could be more flexible towards changes during programme lifetime as businesses always need to adjust to the market needs. More flexibility would be also welcome in the use of total budget (shifting some expenses from one category to another).

A3.33 Other suggestions include an idea to create an “ecobonus” action for Marco Polo III, based on the Italian model, and to further simplify and speed up the project evaluation process.

**Unsuccessful Applicants Survey**

**Question 1:** How did you hear about the Marco Polo programme?

A3.34 As for the response of successful applicants, cited categories of specific events or contacts include various conferences or presentations together with information from consultants, suppliers or press.

![Figure A3.18: Question 1](image)

**Question 2:** Did you find the programme easy to access (find and complete the application forms)?

A3.35 The majority of respondents (73 per cent) stated that the Marco Polo programme was easy to access. Companies that did not find the programme easy to access mainly complained about its long and heavy administrative requirements.
Question 3: Please use the space below to comment on any other aspects of the application procedure and role of the EACI:

A3.36 Very few comments were provided by respondents. Responses from EACI are considered very quick and precise, which is helpful to applicants. One company stated that it would like the application process to be “more open to actual (real) projects rather than studies and projects that might not happen”.

Question 4: Do you feel that the Commission conducted a thorough and objective review of your funding application?

A3.37 Figure A3.20 shows that the majority of companies believe their application was thoroughly and objectively reviewed.
Analysis of Survey Responses

Question 5: We are aware that the Commission provides feedback to unsuccessful applicants for Marco Polo funding. Do you feel that this feedback clearly explains why your application was unsuccessful?

While the majority of respondents stated that the feedback provided a clear explanation, a few companies would welcome a more specific and detailed feedback or an interactive feedback process.

Figure A3.21: Question 5

Question 6: Are you considering re-applying for Marco Polo funding?

The majority of companies are considering re-applying for Marco Polo funding.

Figure A3.22: Question 6
Question 7: Has the project gone ahead without Marco Polo funding?

A3.40 Most of the unsuccessful projects did not go ahead without Marco Polo funding. This proportion may seem different from the Question 6 of the previous section, where successful candidates stated that most of their projects would, or may, have been initiated even without external funding. However, considering only those successful applicants that stated that the project would definitely have gone ahead in the absence of Marco Polo funding (42 per cent) the proportion is similar to that of the projects were unsuccessful in their application to Marco Polo but went ahead anyway (45 per cent).

Figure A3.23: Question 7

Question 8: If yes, was the project amended from that submitted to the Commission?

A3.41 One of the reasons why some changes to the projects were made was to address the comments of the evaluation committee while another respondent stated that the project was changed because without the Marco Polo funding, it was not necessary to meet certain restrictions (for example in terms of competition).
Figure A3.24: Question 8

Figure A3.25: Question 9

Question 9: Did the project receive any other European Commission funding or funding from any public sector sources?

A3.42 Except for one national subsidy and one company participating in the StratMoS project, none of the companies received any funding.

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56 The StratMoS project promotes and facilitates shift of cargo from road to sea-based intermodal transport within the North Sea Region by supporting the implementation of Motorway of the Sea (MoS) in an integrated logistical chain. The StratMoS project is funded by EU and the Norwegian government.
Question 10: Do you feel that the Marco Polo programme has any adverse impacts in the following areas:

A3.43 The vast majority of respondents did not select any option, suggesting that companies do not think Marco Polo programme has any significant adverse impacts.

Table A3.7: Question 10

<table>
<thead>
<tr>
<th>Area</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition within the logistics/transport market</td>
<td>1</td>
</tr>
<tr>
<td>Increased congestion on waterways</td>
<td>0</td>
</tr>
<tr>
<td>Increased congestion on seas</td>
<td>0</td>
</tr>
<tr>
<td>Increased congestion on railways</td>
<td>0</td>
</tr>
<tr>
<td>Increased pollution of seas/waterways</td>
<td>0</td>
</tr>
</tbody>
</table>

Non-applicants Survey

Question 1: How did you hear about the Marco Polo programme?

A3.44 In the main, companies gathered information about Marco Polo through conferences, Marco Polo information day, internet sources or through a special contact familiar with the programme.

Figure A3.26: Question 1
Analysis of Survey Responses

Question 2: Did you consider applying for funding under either Marco Polo I and/or Marco Polo II?

A3.45 Seven companies considered applying under both Marco Polo I and Marco Polo II. The number of companies that considered applying for funding under Marco Polo II was double that of Marco Polo I.

Figure A3.27: Question 2

Question 3: Are you considering applying for Marco Polo funding in the future?

A3.46 As the Figure below shows, 70 per cent of the respondents are considering applying for Marco Polo in the future.

Figure A3.28: Question 3
Question 4: For Marco Polo I: If you considered applying, please specify the reason(s) that you ultimately chose not to apply.

A3.47 An inability to identify a suitable project seems to be the main reason why firms did not apply for funding. The perceived heavy application procedure also discouraged several companies.

A3.48 Other reasons explained in the comments mentioned that non EU countries are not able to participate in cooperation with EU partner.

**Table A3.8: Question 4**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to identify specific project suitable for funding</td>
<td>8</td>
</tr>
<tr>
<td>Application procedure too complex</td>
<td>4</td>
</tr>
<tr>
<td>Application procedure too time consuming and/or costly</td>
<td>4</td>
</tr>
<tr>
<td>Insufficient information available on application procedure</td>
<td>3</td>
</tr>
<tr>
<td>Lack of partners for application</td>
<td>2</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>6</td>
</tr>
</tbody>
</table>

Question 5: For Marco Polo II: If you considered applying, please specify the reason(s) that you ultimately chose not to apply.

A3.49 An inability to identify a suitable project and the perceived heavy application procedure are again the two main reasons why companies did not apply for Marco Polo II funding. There seems to be an improvement in the amount of information available on the application procedure as only one company selected this option as a reason not to apply.

**Table A3.9: Question 5**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to identify specific project suitable for funding</td>
<td>12</td>
</tr>
<tr>
<td>Application procedure too complex</td>
<td>4</td>
</tr>
<tr>
<td>Application procedure too time consuming and/or costly</td>
<td>3</td>
</tr>
<tr>
<td>Insufficient information available on application procedure</td>
<td>1</td>
</tr>
<tr>
<td>Lack of partners for application</td>
<td>3</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>8</td>
</tr>
</tbody>
</table>

Question 6: Do you feel that the Marco Polo programme has any adverse impacts.

A3.50 While the majority of both successful and unsuccessful applicants did not feel that the Marco Polo programme had serious adverse impacts, the Table below shows that non-applicants take a different view.
Most importantly, almost half of the companies believe that the Marco Polo programme has an adverse impact on the competition within the logistic/transport market. For example, it is stated that funding from the Marco Polo can distort competition within the maritime transport sector as funded projects have a great competitive advantage over existing non-funded transporters.

<table>
<thead>
<tr>
<th>Question</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased congestion on railways</td>
<td>4</td>
</tr>
<tr>
<td>Increased congestion on waterways</td>
<td>3</td>
</tr>
<tr>
<td>Increased pollution of seas/waterways</td>
<td>3</td>
</tr>
<tr>
<td>Increased congestion on seas</td>
<td>2</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>8</td>
</tr>
</tbody>
</table>
APPENDIX 4: INFORMATION REQUESTED IN ARTICLE 14 OF REGULATION (EC) NO 923/2009

The Impact of the Marco Polo Regulation as amended by Regulation (EC) No 923/2009

A4.1 The main objectives of the Marco Polo programme are to reduce congestion, to improve the environmental performance of the transport system and to enhance intermodal transport, thereby contributing to an efficient and sustainable transport system which provides EU added value without having a negative impact on economic, social or territorial cohesion.

A4.2 The programme should achieve, by its end, a substantial traffic shift from international road freight traffic to short sea shipping, rail and inland waterway transport, or to a combination of modes of transport in which road journeys are as short as possible.

Effectiveness

Modal shift, catalyst, Motorways of the Sea and traffic avoidance actions

A4.3 For actions that had a modal shift objective (modal shift actions, catalyst actions, motorways of the sea actions and traffic avoidance actions), effectiveness is measured by comparing the achieved and expected tonne kilometres of the different projects. At programme level, we compare the sum overall achievement of modal shift relative to that expected.

A4.4 Table A4.1 shows the total modal shift that was expected and achieved for each year of call under Marco Polo I. As all but one of the Marco Polo I projects are either closed or stopped and a realistic projection has been made for the two remaining final projects, these figures should provide an accurate representation of the success of projects financed under the first Marco Polo programme. It is evident that there is significant underachievement of anticipated modal shift in all years of Marco Polo I.

A4.5 Table A4.2 shows the total modal shift that was expected and achieved for each year of call in Marco Polo II. It should be emphasised that the figure of achieved modal shift will increase over time for the call years of 2007-2009 as many of these projects are still ongoing at an early stage, and hence the final percentage of expected modal shift that will be achieved will be greater than the figures presented in the table.

A4.6 It should be noted, that total volume of reported modal shift corresponds to the yearly average modal shift of 20 billion tkm as targeted by the programme. However, this figure is likely to fall following the increase of funding intensity from 1 to 2 euro per 500 tkm shifted off the roads, which was not matched with a corresponding overall budget allocation to the programme.
Table A4.1: Marco Polo I — total modal shift by call

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>12,396</td>
<td>14,382</td>
<td>9,535</td>
<td>11,401</td>
<td>47,714</td>
</tr>
<tr>
<td>Achieved (Mtkm)</td>
<td>7,253</td>
<td>6,326</td>
<td>4,510</td>
<td>3,373</td>
<td>21,462</td>
</tr>
<tr>
<td>%</td>
<td>58.51</td>
<td>43.99</td>
<td>47.30</td>
<td>29.59</td>
<td>44.98</td>
</tr>
</tbody>
</table>

Source: EACI data

Table A4.2: Marco Polo II — total modal shift at Mid-December 2010 by call

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>27,835</td>
<td>16,334</td>
<td>17,177</td>
<td>61,285</td>
</tr>
<tr>
<td>Achieved at mid-December 2010 (Mtkm)</td>
<td>6,562</td>
<td>1,703</td>
<td>380</td>
<td>8,645</td>
</tr>
<tr>
<td>% at mid-December 2010</td>
<td>23.58</td>
<td>10.43</td>
<td>2.22</td>
<td>14.11</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Figures for Marco Polo II relate to projects that are currently still going and it is likely that such figures increase over time. Figures for traffic avoidance actions are the tonnekilometre equivalent of vehiclekilometres.

**Catalyst actions**

5.33 Catalyst actions, in addition to the modal shift objective, aim to overcome one or more structural barriers. The structural barriers are specific to each project and hence it is not possible to provide a quantitative assessment of success in overcoming such barriers on a consistent basis. However, a qualitative assessment is possible and an inconsistent picture emerges. Two contracts were terminated before a service could begin and hence structural barriers were not overcome while a third contract was terminated with limited success in overcoming the structural barriers identified.

5.34 Nonetheless, the majority of catalyst actions have been relatively successful in overcoming the identified structural barriers. Some projects have successfully overcome psychological barriers to intermodal transport while others have successfully overcome technical difficulties that existed prior to the award of Marco Polo funding. While some projects overcome only a subset of all barriers identified, the general picture is positive: catalyst actions for which the proposed service has become operational have typically succeeded in overcoming the identified structural barriers.

5.35 This implies that the effectiveness estimate for catalyst actions presented in the tables above (and hence based on the modal shift objective alone) is probably an underestimate of the true effectiveness of the actions. However, it is not possible to quantify the impact of overcoming a structural barrier in monetary terms and hence this point must be treated qualitatively.

**Traffic avoidance and common learning actions**

A4.7 It is too early to fully assess the effectiveness of traffic avoidance actions, though the achieved figures at mid-December 2010 have been included in Table A4.2. As of mid-
December 2010, only two such actions have received funding, both in the 2009 call. Data on the success of these projects are, hence, limited at present. One project has, at mid-December 2010, achieved 3.1 per cent of its forecast modal shift while figures for the other project have not yet been received by EACI.

A4.8 Based on a review of the final approved report of all five common learning actions in the 2005-2007 calls, and the “fiche de trasfert” for the two awarded funding in the 2004 call, it appears that they have been relatively successful in achieving their stated objectives. Indeed, a number of projects having a success rate of 100 per cent. For this type of project, however, there is an important difference between noting whether the project achieved the stated operational objectives and assessing whether the project has a real effect on the practices of logistics and other companies concerned; or on the likely future growth in intermodal transport. The evidence on this point is less clear.

**Environmental benefits**

A4.9 Applicants for funding under the Marco Polo programme are required to present in their proposals a forecast of environmental benefits that will be achieved through the project. Such estimates are formed using the Marco Polo calculator, a pre-formatted Excel spreadsheet that is available in the application packs for each call via the Marco Polo website.

A4.10 The Marco Polo calculator is widely considered to be outdated and hence does not provide accurate estimates of the environmental benefits that might be achieved by each project. This presents a problem for quantifying the aggregate environmental achievement of the Marco Polo programme.

A4.11 Our analysis has shown that the percentage achievement of foreseen environmental benefits follows a similar pattern to that of modal shift.

A4.12 The EC commissioned a revision of the calculator and organised an external review of the revised calculator which was finalised in January 2011. The key finding of the external review was that while the proposed new version of the calculator is an improvement on the previous version, there remains scope for further fine-tuning. In general, the output of calculator was considered adequate for comparative purposes (i.e. between different Marco Polo projects) but the external reviewers noted that it is not considered adequate for producing quantitative assessments of the externalities of a specific transport service.

**Efficiency**

A4.13 One indicator of the efficiency of a project is the ratio of outputs (in the case of projects with a modal shift objective, tkm achieved) to inputs (in this case € in the committed budget or the amount of money actually paid to projects). A greater ratio implies that the project had greater efficiency, in that more freight was shifted per € of subsidy committed or paid.
A4.14 At this point, it should be noted that there is an observed decrease in the efficiency during Marco Polo II project. This can be explained by changes to the rules governing projects, in particular the doubling in the funding intensity (new projects were funded at a rate of €2 per 500tkm / 25vkm, when the previous rate was €1 per 500tkm achieved or 25 vkm avoided) and the new definition of modal shift (valid as from call 2010 and later) introduced by Regulation EC 923/2009.

A4.15 Table A4.3 shows the efficiency that was achieved in Marco Polo I while Table A4.4 shows the efficiency that has been achieved at mid-December 2010 in Marco Polo II. Both of these tables are based on funds that were committed to projects rather than funds actually paid to those running projects. The rationale for including this efficiency measure is that once money is committed to projects it is ‘tied-up’ and cannot be put to other uses, even if projects are struggling and clearly will not be granted the full amount. This point is discussed in greater detail below together with options for reducing the severity of this problem in the future.

**Table A4.3: Marco Polo I — efficiency by call (committed funds, projects other than catalyst actions and common learning actions)**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>573</td>
<td>307</td>
<td>252</td>
<td>212</td>
<td>326</td>
</tr>
</tbody>
</table>

Source: EACI data

**Table A4.4: Marco Polo II — efficiency at mid-December 2010 by call (committed funds, projects other than catalyst actions and common learning actions)**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>761</td>
<td>538</td>
<td>288</td>
<td>486</td>
</tr>
<tr>
<td>Efficiency achieved at mid-December 2010 (tkm / €)</td>
<td>210</td>
<td>83</td>
<td>23</td>
<td>127</td>
</tr>
</tbody>
</table>

Source: EACI data

Note: Figures for Marco Polo II relate to projects that are currently still ongoing and it is likely that such figures increase over time.

A4.16 Table A4.5 shows the project efficiency based on funds actually paid to beneficiaries under Marco Polo I. Figures are not available for Marco Polo II at present as these projects are ongoing and hence final payments to beneficiaries have not yet been determined.

A4.17 There is a crucial distinction between these figures and those presented above based on committed funds since beneficiaries are reimbursed on the basis of project results and are not paid the full amount committed to their project unless all objectives are met.

A4.18 If all projects achieved 100 per cent of the objectives, the efficiency figures based on committed funds and paid funds would be the same. However, the vast majority of actions have achieved less than 100 per cent and hence the efficiency of projects
measured through committed funds is less than efficiency figures estimated on the basis of paid funds. This is clearly illustrated by comparing Table A4.5 with Table A4.3.

Table A4.5: Marco Polo I — efficiency by call (paid funds, projects other than catalyst actions and common learning actions)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency expected (tkm / €)</td>
<td>979</td>
<td>800</td>
<td>584</td>
<td>628</td>
<td>741</td>
</tr>
<tr>
<td>Efficiency achieved (tkm / €)</td>
<td>918</td>
<td>595</td>
<td>672</td>
<td>501</td>
<td>679</td>
</tr>
</tbody>
</table>

Source: EACI data

A4.19 For Marco Polo I projects as a whole, the efficiency expected was, on average, 741tkm per € of subsidy. It is interesting to note that some projects achieved more than 100 per cent of their objectives but could not receive more than the maximum subsidy specified in the Grant Agreement. In contrast, some projects significantly under-achieved their objectives.

A4.20 The average outturn of 326tkm per € of subsidy when measured on the basis of committed funds and 679 tkm per € of subsidy when measured on the basis of paid funds demonstrates that projects were less successful than had been expected. Moreover, efficiency fell significantly in the 2006 call, possibly as a result of a more difficult economic climate or because applicants had learnt how to ‘game the system’ when applying for funds and hence overstated expected modal shift compared with what would have been realistic objectives.

A4.21 Nonetheless, the fact that payment to beneficiaries is conditional to the achievement of results is an important and positive aspect of the Marco Polo programme design, despite the negative side effects of under-use of committed budget. Such a feature ensures that the incentives of beneficiaries and taxpayers are aligned and there is no other mechanism that would provide stronger incentives for projects to succeed.

A4.22 An additional element to consider in this analysis is the leverage effect of the Marco Polo programme, i.e. the value of private investment per €1 of EU subsidy. For Marco Polo I, the foreseen EC contribution was approximately between 2 and 10 per cent of the total project budget, indicating that each euro of EC funding was associated with between €1 and €9 private investment. Whether this foreseen leverage effect was fully achieved is unclear since we are unaware of the total final project budgets (though we do know the final EC contribution).

57 Except for CLA where a maximum of 50 per cent is applicable
Deadweight

A4.23 In an evaluation of the effectiveness of a programme of public subsidy of private sector economic activity, the question of deadweight has to be confronted. If an activity that would have taken place without subsidy receives a subsidy, there is no benefit to the taxpayer and the subsidy paid is “deadweight” on the overall effectiveness of the programme.

A4.24 As indicated, the information on deadweight can be obtained from the results of the questionnaire survey. Of 33 respondents to a question in the beneficiaries’ survey on whether the projects would definitely have gone ahead in the absence of Marco Polo funds, 14 (i.e. 42 per cent) stated that they would. Forty five per cent of respondents to the unsuccessful applicants’ survey (i.e. 5 of 11 respondents to the question) stated that the projects had gone ahead without funding from the Marco Polo programme. Although it was outside the scope of this project to investigate the circumstances of each case sufficiently to be sure that these judgements are reasonable, there would if anything be likely to be a bias in respondents’ replies in favour of saying that the projects were dependent on the subsidy. Hence, the finding that a significant proportion of projects would have gone ahead without Marco Polo funding questions whether or not the programme is fully ‘adding value’ to what could be achieved through private sector funding.

Contribution and legacy of the programme

A4.25 Of 32 respondents to a survey question on the legacy of projects financed under the Marco Polo programme, 23 (i.e. 72 per cent) stated that the projects would continue (for Marco Polo II) and have continued (for Marco Polo I) following the end of the Grant Agreement of Marco Polo. This is an encouraging finding since it indicates that short-term funding may have created long-term change, although in this case there is a risk of existence bias and response bias (explained in greater detail at paragraph 4.72) that may mean that the estimate is exaggerated to some extent.

Impact of Regulation (EC) No 923/2009

A4.26 Regulation (EC) No 923/2009 aimed, among other objectives, to further increase participation in the Marco Polo programme by SMEs and to lower the minimum subsidy thresholds for different action types (and in particular for projects using inland waterways). This regulation came into effect for the 2010 call for proposals.

A4.27 It is too early to conduct a full assessment of the impact of this regulation but a preliminary qualitative assessment is possible. As no direct data are available at present from EACI or another source, this assessment is based on a total of 20 interviews with successful applicants, unsuccessful applicants and non-applicants for Marco Polo funding about what they believe the impact of the amendments in the regulation may be. A brief summary of responses is provided in this section.
Lower thresholds

A4.28 The views of those that had successfully applied for funding under the Marco Polo programme were mixed concerning the benefit of reducing thresholds. While it was recognised that this action would make it easier to participate and result in more applications, one interviewee stated that higher thresholds mean that smaller firms have to collaborate which it sees as a good thing.

A4.29 Unsuccessful applicants for funding were also divided in their opinions with one interviewee stating that lowering thresholds would encourage smaller and more innovative actors to apply for funding while another argued that thresholds should not be amended, so as to encourage collaboration.

Minimum duration of contracts and possibility to extend contracts

A4.30 The vast majority of interviewees that had received Marco Polo programme funding agreed that this is a sensible change that is likely to help projects to succeed. The main argument is that there are likely to be delays in the initial phase of projects and so prolonging the project can enhance success. One interviewee suggested that the change would allow more innovative projects and argued that this is beneficial because smaller projects encourage innovation and are generally more successful than big projects which often fail.

A4.31 Unsuccessful applicants were not in favour of this policy due to a concern that there would be an unintended consequence of slowing down the performance of projects as beneficiaries would be under less pressure to complete projects within the agreed timeframe. However, given that companies are always paid on the basis of results, and that the overall goal of the Marco Polo programme is to create a more sustainable transport system, we consider that the possibility of permitting extensions when considered justified by EACI is a positive amendment that should help to improve the success rate of projects.

New definition of freight

A4.32 The majority of those that received funding under the Marco Polo programme felt that including empty containers and transport units in tonnage calculations, the change brought in by the new Regulation, is important and would be beneficial as it can reduce project risk. Among unsuccessful applicants there were two different views on whether or not this would be beneficial.

Possibility of applications by single undertakings

A4.33 Recipients of Marco Polo funding had mixed views about this policy. Some considered that requiring applications to be submitted by a number of partners enhances the credibility and success of projects while one noted that collaboration is important for common learning actions. Others, however, felt that the policy is sensible and will
encourage applications and that it would save time that would otherwise be spent looking for trusted partners.

**A4.34** Unsuccessful applicants were similarly mixed in their views. One stated that the policy would deliver benefits to the programme while another queried whether a real European benefit could be obtained without partnerships.

**Financing of ancillary infrastructure**

**A4.35** Funding of ancillary infrastructure (understood as the necessary and sufficient infrastructure to achieve the goals of actions, including freight-passenger installation) is permitted for all except for common learning actions\(^{58}\). At present, this is currently being used as much as it is incorporated in the total financial business plans. As such it is evaluated according to the different criteria for the overall proposal. In the operational financial reality payments are being made on the basis of the tkm or losses (and mainly never on the eligible costs) which in practice means that ancillary infrastructure are not financed as such nor under separate provisions.

**A4.36** The new Regulation requires that all action types other than common learning actions can now receive finance for ancillary infrastructure (up to 20 per cent of the total eligible costs of the action). Again, interviewees that had received funding under the Marco Polo programme were divided over the merits of this policy. Arguments against generally suggested that the Marco Polo programme should not be financing ancillary infrastructure, partly because subsidised infrastructure finance is available through the TEN-T programme. However, others argued that this may help to encourage applications for projects that require such investment and hence have a greater degree of risk.

**A4.37** All unsuccessful applicants that responded to this question argued against the concept of Marco Polo providing funding for ancillary infrastructure as there are other sources of funding for this.

**Conclusions on Regulation (EC) No 923/2009**

**A4.38** It is difficult to determine, at this stage, what the impact of Regulation (EC) No 923/2009 will be. The impact will be more apparent when data on the 2010 call for proposals are available. However, based on the views of stakeholders in the programme, the regulation appears likely to lead to an increase in applications for funding and may help to increase the proportion of forecast modal shift that is achieved. This would lead to a corresponding increase in project efficiency.

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\(^{58}\) Regulation EC 1692/2006, Article 2.
The Experience of the Executive Agency for Competitiveness and Innovation with Programme Management

A4.39 One of the most important changes over the life of the programme was the transfer of management in 2008 from the Commission to the EACI. EACI was established to deliver efficiently high-quality European programmes and initiatives in the areas of energy, transport, the environment, competitiveness and innovation. The Agency manages several programmes and initiatives in addition to Marco Polo:

(a) Intelligent Energy Europe (since 2004);

(b) Enterprise Europe Network (since 2008); and

(c) Eco-innovation (since 2008).

A4.40 We consider that the delegation of Marco Polo management to EACI resulted in an improvement in its operational management. According to our survey, the overall assessment of EACI agency is reflected to be "very good" or "good" in 23 (out of 30) of the beneficiaries (80 per cent). This includes "very good" or "good" ratings in at least 15 of the responses for different managerial aspects of EACI.

A4.41 The evaluation of this improvement based on other performance indicators it is difficult, as data are not available before 2008. However, reports from EACI indicate a number of improvements in the management requirements and performance of the programme from 2008 onwards:

(d) the number of applications received has increased from 46 in 2008 to 101 in 2010, requiring more managerial time for processing and evaluating them;

(e) there has been a significant improvement in the average time to contract which has fallen from 461 days in 2008 to 328 days in 2010; and

(f) the average payment time is below the target of 30 days, as evidenced by average payment times of 25 days in 2008, 16 days in 2009, and 24 days in 2010.

A4.42 The comparison of the management under the Commission or EACI needs to consider the differences in resources allocated in both cases. The number of staff involved in management activities was in the order of 6.3 full time equivalents (FTE) in 2007 when the programme was managed by the DG TREN. The figure compares well with 6.3 FTE

59 EACI was known as the "Intelligent Energy Executive Agency" prior to 2007 and held responsibility for managing the Intelligent energy Europe programme.

60 This includes: the time taken to assess applications and make awards; contracting arrangements and procedures; monitoring arrangements and procedures; application procedures and timescales; requirements regarding activity and final report; time taken to process requests for payment; different aspects of programme management; information about the programme; and responsiveness of EACI to requests for information.
In the same study it was estimated a requirement of 16.5 and 18.5 FTE for in-house and EACI management, respectively, in a future peak situation in 2013.

A4.43 Hence, an important part of the improvement experienced since 2008 can undoubtedly be attributed to increased staffing. In turn, this has allowed EACI to provide increased assistance to applicants by setting two new functional mailboxes and a help desk with a dedicated phone number for solving queries about the programme. During the two- to three-months of the open call period, between 900 and 1000 requests are managed by EACI's helpdesk, providing responses in less than 24h; during out-of-call periods there are about 2-4 daily requests.

A4.44 In previous studies there has been the perception that the application procedures were complex. We did not find overwhelming evidence of this in our survey to non-applicants (the main reasons for not applying were more related to the inability to find suitable funding). We do note the presence of consultants in preparing the proposals and the importance of these has been emphasised by successful applicants. This suggests there may be a barrier or difficulty for applicants when filling their own application.

A4.45 The main weakness of the programme is the inability to allocate all the available funds to beneficiaries. During the first years this could be attributed to a lack of awareness among the targeted audience. Later, this was attributed to the poor quality of proposals and drop out of short-listed projects during the evaluation process.

The Need to Differentiate between Transport Modes with Regard to the Conditions for Funding on the basis of Safety, Environmental Performance and Energy Efficiency

A4.46 The new version of the Marco Polo calculator, which is used to estimate the environmental benefits associated with actions financed under the Marco Polo programme, includes different external cost values for several modes of transport.

A4.47 Given that emissions factors differ by mode of transport, and that the a key aim of the Marco Polo programme is to create sustainable freight transport through a reduction in sector emissions, it makes abundant sense that the calculator of environmental costs incorporates different values for each mode of transport. In a policy designed to limit the impact of the sector on the environment, including such differentiation between transport modes is critical.

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61 Cost-effectiveness study concerning the externalisation of programme management tasks related to the second “Marco Polo” Programme (2007-2013).
62 The current staff size managing Marco Polo in EACI is in the order of 10 FTE, and this excludes around 2 FTE responsible for indirect administrative tasks (communication services, payroll, audits, human resources..., which did not exist under the Commission’s management). There were 8 FTE in 2008 (9 in 2009 and 10 in 2010) in EACI for the management of Marco Polo, which represents a significant increase compared to the 4-6 FTE estimated for the management under the Commission.
63 Based on evaluation Marco Polo 2003-2006 and conversations with Commission officials.
A4.48 Despite the fact that the calculator reflects differentiation between transport modes, the current Marco Polo funding conditions are the same for modal shift towards rail, SSS and IWW. In particular, since subsidies are based on the tonnekilometre shift rather than environmental benefits achieved through a given modal shift there is no additional benefit for shifting to more environmentally efficient transport modes.

A4.49 There are arguments for and against between transport modes with regard to the conditions for funding, on the basis of safety, environmental performance and energy efficiency. Arguments in favour include:

(g) it would support the most environmentally friendly modes and thereby provide greater benefits for the environment;

(h) it would give a positive signal concerning the Commission’s environmental objectives; and

(i) it could spur behavioural change in the freight sector.

A4.50 Arguments against include:

(a) increased complexity;

(b) additional administrative burden; and

(c) lower transparency in view of uncertainty about external costs of various transport modes.

The Possibility of Indicating the Targets for Minimum Funding Thresholds for Proposed Actions in terms of Energy Efficiency and Environmental Benefits in addition to Tonne-kilometres Shifted

A4.51 The analysis of the possibility of indicating the targets for minimum funding thresholds for proposed actions in terms of energy efficiency and environmental benefits in addition to tonne-kilometres shifted builds on that of the previous section. In particular, given that we supported the need to differentiate between transport modes with regard environmental performance and energy efficiency, we now assess whether targets should be based on these factors.

A4.52 In principle, the setting of such targets is an attractive proposition and would further the aims of the Marco Polo programme by favouring modes of transport that have lower emissions and hence can achieve a greater environmental benefit per tkm shifted off the road. At a practical level, however, we consider that there would be difficulties implementing the policy in an equitable manner due to the fact that the output of the
Marco Polo calculator may be adequate for comparative purposes but not for the production of quantitative assessments of the externalities of a specific transport service.\(^{64}\) The policy could also lead to confusion amongst stakeholders because of the existence of various overlapping targets and hence may both discourage applications for Marco Polo funding and place an additional burden on the Marco Polo helpdesk.

A4.53 While it would be possible to set targets on the basis of the environmental benefit estimates provided by the calculator (and the same errors would apply to the targets as to the project forecasts), we have a concern that the error in the output may differ between transport modes. If this is the case and, for example, there is a greater downward error in potential savings per tkm for IWW than for rail, the setting of environment-based targets would be a disadvantage to IWW. This inequity would not, we consider, be to the benefit of the programme.

**The Effectiveness of Traffic Avoidance Actions**

A4.54 It is too early to fully assess the effectiveness of traffic avoidance actions. At mid-December 2010, only two such actions have received funding, both in the 2009 call. Data on the success of these projects are, hence, limited at present. One project has at mid-December 2010 achieved 3.1 per cent of its forecast modal shift while figures for the other project have not yet been received by EACI.

**The Need to set up Demand-driven Assistance at the Application Stage, taking into account the needs of Small and Micro Transport Enterprises**

A4.55 Since becoming responsible for operational management of the Marco Polo programme, EACI has provided increased assistance to applicants by setting two new functional mailboxes and a help desk with a dedicated phone number for solving queries about the programme. During the two- to three-months of the open call period, between 900 and 1,000 requests are managed by EACI’s helpdesk, providing responses in less than 24 hours; during out-of-call periods there are about two to four requests.

A4.56 The high usage rate of the helpdesk by applicants suggests that it is a service of great value and, in particular, can help SMEs to understand the detail of application procedures. Between 2003 and 2009, 40 per cent of the leaders of Marco Polo projects are classified as SMEs while of all 507 companies that benefitted from Marco Polo funding (including lead partners), 53 per cent were classified as SMEs and the Regulation sought, in part, to increase this participation rate further. The Marco Polo helpdesk should lead to increased SME participation in the programme.

A4.57 Despite this, the evaluation of Marco Polo I found that the call for proposals was clear in text and procedures for most partners but that the application process was viewed as

\(^{64}\) Bates, van Essen and Kehoe (2011) “Peer Review of Marco Polo Calculator”
Information Requested in Article 14 of Regulation (EC) No 923/2009

complex. In particular, many participants needed assistance from consultants to submit proposals and many applicants experienced difficulties in the calculation of eligible modal shift of freight. The Marco Polo calculator (introduced in 2004) was often used for the calculations but apparently was not always used in the correct way.

A4.58 Our survey indicates that there are still difficulties in writing some elements of the proposal: almost 45 per cent of successful applicants stated the environmental benefits and external costs savings sections as the hardest elements of the proposal; distortion of competition was selected by over 35 per cent of the respondents. The most striking finding of our survey is the fact that close to 80 per cent of beneficiaries used consultants to draft the proposals, and, moreover, 70 per cent of them believe this was an important element for the success of the application.

A4.59 Indeed, the different requirements imposed for the evaluation of proposals (in the form of formulas to be able to differentiate between various levels of quality of proposals) poses an administrative burden to applicants. Our findings suggest that this burden could be seen as ineffective or excessive as these requirements do not contribute to increasing the achieved targets.

A4.60 Europe Economics considers that EACI already provides demand-driven assistance at the application stage through its functional mailboxes and helpdesk. We consider this to be appropriate and sufficient in the context of the current Marco Polo programme and recommend that any successor to the programme incorporate these (or similar) arrangements for providing assistance to applicants.

The Recognition of Economic Recession as an Exceptional Reason for Extending the Duration of Actions

A4.61 There has been a significant drop in transport volumes, both national and international, since 2007. Indeed, national road freight transport volumes were three per cent lower in the fourth quarter of 2009 than in the corresponding quarter of 2008 while international road transport volumes fell by two per cent over the same period.

A4.62 The European Sea Ports Organisation (ESPO) has reported that total throughput at European ports (measured in tonnes) decreased by 15 per cent between the first 6 months of 2008 and the same period in 2009. Total throughput for the first half of 2010 was 7.8 per cent greater than the 2009 figure and hence still below the 2008 level.

A4.63 Significant declines in rail freight transport volumes have been observed across Europe. Indeed, only two countries recorded growth in the last quarter of 2008 compared to the

65 In the evaluation of Marco Polo 2003-2006 it was also noted the difficulties experienced by participating with the reporting formats, and it was recommended to use standard formats and templates.
67 European Sea Ports Organisation (2010), “Traffics Data up to Second Quarter of 2010”, Section II-1, Page 4
same quarter in 2007 (Latvia registering impressive growth of almost 11 per cent) and all other countries registered a decline in the same period. Double-digit losses were experienced in 14 countries, the greatest of which were Luxembourg (-30 per cent), Greece (-26 per cent) and Belgium (-24 per cent).

A4.64 It is interesting to note that road freight transport has suffered a lower decline in transport volumes that have other transport modes. One explanation for this might be that road transporters have heavily lowered prices in an attempt to retain market share and discourage modal shift away from the road. Eurostat has reported that road freight prices have been under pressure since peaking in the third quarter of 2008 and in the fourth quarter of 2009, they were 2 per cent below their level in the corresponding quarter of 2008. Anecdotally, we have been informed that road transport prices have been lowered in some cases by as much as 50 per cent.

A4.65 Such reductions in the cost of transporting freight by road would provide a significant disincentive to switch to non-road modes of transport and would provide a positive incentive to switch from non-road transport to road transport (“reverse modal shift”). This situation, combined with an overall reduction in transport volume due to the recession, would create make it more difficult for recipients of Marco Polo funding to meet the forecast modal shift volumes and could provide a rationale for extending the duration of actions.

The Lowering of the Eligibility Thresholds for Product-specific Actions

A4.66 It is too early to conduct a full assessment of the impact of this change introduced in Regulation 923/2009 and hence it is difficult to provide an evidence-based prediction of the potential impact of further reducing eligibility thresholds.

A4.67 Based on a total of 20 interviews with successful applicants, unsuccessful applicants and non-applicants for Marco Polo funding, we found that the views of those that had successfully applied for funding under the Marco Polo programme were mixed concerning the potential benefit of reducing thresholds. While it was recognised that this action would make it easier to participate and result in more applications, one interviewee stated that higher thresholds mean that smaller firms have to collaborate which it sees as a good thing.

A4.68 Unsuccessful applicants for funding were also divided in their opinions with one interviewee stating that lowering thresholds would encourage smaller and more innovative actors to apply for funding while another argued that thresholds should not be amended, so as to encourage collaboration.

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www.europe-economics.com 143
A4.69 A risk associated with reduced thresholds is that the likelihood of the Marco Polo programme providing finance to micro-projects (e.g. those with a Grant Agreement lower that €50,000) is increased. If several such projects were financed in each call, the lowering of the eligibility thresholds would have an important impact on the operational burden EACI. The beneficiary may also find the operational burden to be significant relative to the scale of subsidy received.

The Appropriateness of Including the Transport Unit in the Definition of the term “Freight”

A4.70 Regulation 923/2009 introduced a new definition of freight. In particular, rather than modal shift being calculated on the basis of net freight transported the definition now includes the weight of the intermodal transport and the road vehicle (including empty intermodal transport and road vehicles) where these are shifted off the road. 69

A4.71 Including the transport unit in the calculation of freight that is shifted from the road would in theory have the following effects:

(a) a reduction in the thresholds overall;

(b) a reduction in the efficiency of the programme; and

(c) favouring accompanied transport compared to un-accompanied transport, which is intrinsically less environmentally friendly.

A4.72 It is too early to conduct a full assessment of the impact of this change introduced in Regulation 923/2009 (as from call 2010) but a preliminary qualitative assessment is possible. As no direct data are available at present from EACI or another source, this assessment is based on a total of 20 interviews with successful applicants, unsuccessful applicants and non-applicants for Marco Polo funding about what they believe the impact of the amendments in the regulation may be.

A4.73 The majority of those that received funding under the Marco Polo programme felt that including empty containers and transport units in tonnage calculations, the change brought in by the new Regulation, is important and would be beneficial as it can reduce project risk. Among unsuccessful applicants there were two different views on whether or not this is beneficial.

A4.74 Europe Economics considers that if the intention of the legislator with this measure was to lower the thresholds overall, then it would appear that it is advisable to rather act directly on the threshold setting as this would not have the side-effects of reduced efficiency and bias towards accompanied transport.

The Availability of Complete Yearly Overviews of Actions which have been Co-financed

A4.75 Under Article 14 of Regulation (EC) 1692/2006, the Commission must provide information concerning the financial execution of the Programme and give an update of the status of all actions financed under the programme to Committee at least twice a year. In practice, this information is typically disseminated by EACI in the form of a presentation to the Committee and hence twice-yearly overviews of actions which have been co-financed are available.

The Possibility of Ensuring Consistency between the Programme, the Logistics Action Plan and the TEN-T by taking the Appropriate Measures in order to Coordinate the Allocation of Community Funds, in particular for Motorways of the Sea

A4.76 The Trans-European Transport Network is being established gradually by integrating land, sea and air transport infrastructure components, and by including the necessary technical installations, information and telecommunication systems to ensure smooth operation of the network and efficient traffic management.

A4.77 The TEN-T programme has recently been subject to a comprehensive review and, on the basis of that review, proposals have been formulated for the future of the programme. The basic framework for the new trans-European transport network is a dual layer planning approach, consisting of a comprehensive network as the basic layer and a core network.

A4.78 At present, there are several corridor concepts in existence, such as rail freight corridors, ERTMS corridors and “green corridors” as introduced by the Logistics Action Plan. It is expected that the new TEN-T Guidelines will merge these different concepts into multi-modal corridors. Within this context, Motorways of the Sea projects will be a building block of the maritime dimension of the future TEN-T and hence there is a clear potential synergy here with the Marco Polo programme. In this context, ports and their hinterland connections will merge into the multi-modal corridors, notably for freight.

A4.79 There is a clear potential complementarity between TEN-T and Marco Polo in the sense that one provides funds for transport infrastructure while the other provides funds for transport services using those infrastructures. In the future, it is possible that the Marco Polo programme could operate within the revised framework of TEN-T, in line with the multi-modal core network and “corridor” approaches. In particular, following designation of the multimodal core network and corridors, the potential effects of integrating the Marco

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Polo funding instrument into the overall approach of making the selected corridors more efficient and sustainable should be studied in some detail.

**Practical challenges**

A4.80 At present, both programmes have a fundamental difference in the relationship with their beneficiaries and this represents one aspect of the practical challenges of integrating the Marco Polo and TEN-T programmes.

A4.81 In the case of Marco Polo, the funding decisions are adopted by the Commission on the basis of the list adopted by the evaluation committee composed of Commission and EACI representatives. Furthermore, since there is a contractual relationship between the Agency and the beneficiary, the former may subsequently (within the framework of the EU financial regulation) change the specifications of the contract (to account for changes in the market, for example). Since the revision of the Marco Polo Regulation in 2009, the list of projects is adopted by the Commission without approval by the Marco Polo Management Committee.

A4.82 For TEN-T, the signatory of the contractual relationship is not the Agency but the Commission, so that any potential amendments are subject to the Commission approval (unlike for Marco Polo projects). Every year the TEN-T EA ‘proposes’ to the Commission the list of projects to be approved under a regulatory committee, and because this involves the allocation of funding for different Member States, the list of projects to be funded is subject to the committee’s approval. In this case, there is no contract between TEN-T EA and the recipient of funding and a Commission funding decision is notified to the Member States allocating funds to the recipient. The Commission funding decision has the same enforcement powers as private contracts but amending a Commission decision is more complex from a procedural point of view compared to changing grant agreements under Marco Polo, and takes also longer.

A4.83 It is clear that, as in the Marco Polo support is given to private companies in a competitive environment, the issue of distortion of competition is more sensitive compared to infrastructure funding. The TEN-T programme faces this difficulty to a much lesser extent because financial support is given to infrastructure projects previously approved by Member States and open to all private operators. Instead, the TEN–T programme has to deal with critical issues related to the procurement procedures followed by beneficiaries. The European public procurement rules are strict and it is hence important to ensure that beneficiaries of TEN-T funding (i.e. Member States) are fully compliant with the European tendering requirements. Non-compliance would mean that there could be an unfair advantage conveyed to some firms.

A4.84 Furthermore, beneficiaries of Marco Polo are mostly private enterprises, whereas the beneficiaries of TEN-T are mostly Member States, this entails a different financial risk environment for the European Union interest.
A4.85 Operational aspects also make the management of the programmes very different. In particular the interaction with beneficiaries (SME and relationship with the industry), the necessary arrangements of the payments and recovery, and the management of the grand agreements and need for flexibility for any potential contract amendments are special features of the Marco Polo programme.

A4.86 Therefore, the two programmes face a very different legal and financial environment, and it was argued that these differences imply that if Marco Polo, as currently designed, is transferred to the TEN-T EA it would entail that this Agency would need to create new procedures and control mechanisms specific to the Marco Polo programme, parallel to the existing ones for EACI. This conclusion may be different, however, depending on how the Marco Polo programme is redesigned.

Potential synergies or economies of scale between the Marco Polo and TEN-T programmes under one executive agency

A4.87 We have investigated whether there are potential savings from undertaking the different programme operations by a single agency, for both programmes under their current design. This explores the productivity of different agents working together (synergy) and the increased productivity due to producing a larger output (economies of scale). We investigated any effects on the following operations: awareness of its beneficiaries, evaluation of tenders and monitoring of projects.

(a) Beneficiaries

The beneficiaries of the projects are generally different. In the case of TEN-T, beneficiaries are mainly Member States and bodies operating under public supervision, while in the case of Marco Polo beneficiaries are companies or small and medium enterprises. This means that there are no potential gains from targeting the potential audience together. Awareness campaigns, marketing efforts, and even display of information or responses to queries need to be specific and probably need to be done independently for every programme too. Furthermore, EACI can exploit some synergies at the level of EACI’s communication officers because of the similar nature of recipients apply for funding under several programmes run by the Agency.

(b) Evaluation of tenders

The evaluation of the projects relies often on the opinion of experts and there is potential that the same group of experts could be used to evaluate projects under both programmes. However, the experts are already external and unrelated to the Agencies and this means the situation would not change if both programmes were provided by the same Agency.

(c) Technical monitoring

There are some potential savings to be reaped from the monitoring and follow-up of projects. But because of the different nature of the programmes the type of controls
undertaken is very different. In the case of TEN-T the cycle of projects is longer, projects go through very different stages and the output is relatively easy to observe, i.e. infrastructure or studies. In the case of Marco Polo the justification needed to receive the funds is different since it is mostly measured in terms of modal shift and the monitoring needs to verify whether targets have been achieved and more regular visits are required. In terms of policy feedback to the Commission, however, there could be some savings from synergies stemming from a greater specialisation of staff. Specialisation would mean that staff would benefit from exchange of knowledge between Marco Polo and TEN-T project managers resulting in added value for the Commission in terms of feedback for policy purposes.

A4.88 Finally, if both programmes were managed by the same Agency, they could benefit mutually and evolve into a more similar environment, not least in the current context of discussions for the budgets of the next 5 to 7 years. For example, Marco Polo is often criticised for not making use of all its committed funds (as seen, this is due to poor response to Calls in the past, but also to projects failing to achieve their planned objectives). Whereas EACI engages the whole Marco Polo funding up-front, for the so-called multi annual projects TEN-T EA allocates its funds using an instalment approach, such that it is not necessary to commit all funding for a project at the very beginning. This mechanism allows for recycling a substantial proportion of funds to new calls for proposals when needed and much better use of the Union funds.

A4.89 Additional synergies could be exploited for Motorways of the Sea projects since finance for such projects is already available both under the Marco Polo programme and the TEN-T programme. Indeed, Motorways of the Sea is a Priority Project of the TEN-T and there are, quite clearly, synergies that could be exploited in providing funding for projects through just one Executive Agency rather than for two, if the operational structures of the successor to the Marco Polo programme and TEN-T are similar.

The Possibility of Making Costs incurred in a Third Country Eligible if the Action is Carried out by Undertakings from a Member State

A4.90 One of the key aims of the Marco Polo programme is to create a more sustainable the transport system by reducing the external costs arising from international freight transport. This goal is primarily achieved by shifting transport from road to other more sustainable transport modes on routes between two EU Member States or between a Member State and close third countries.

A4.91 If the costs for actions incurred in a third country (other than those defined as ‘close’) would become eligible, then the corresponding environmental benefits arising in such third countries should also be taking into account into the programme objectives. It would not be reasonable to include costs within the programme unless benefits are included also since the costs can only be justified insofar they contribute to achieving the programme's objectives. However, this would represent a fundamental change to the programme, transforming it from an EU programme into an international funding instrument. This would render its set-up and operation significantly more complicated.
A4.92 If costs incurred in countries outside the EU and participating countries were to become eligible there is a question of how this would be financed. At present, the EU financing provided to participating companies comes from a budget line fed by the EU member states and participating countries that make a special financial contribution (on the basis of specific agreements). The incoming money can only be used in the funding (participating) countries and hence expenses incurred in countries that do not provide funding to the Marco Polo programme cannot be financed at present. Hence, a new methodology would need to be developed if costs incurred outside the EU and participating countries were to become eligible. This issue would need to be considered in detail before any decisions are taken regarding such extension of the eligible costs definition.

The Need to take into Account the Specific Characteristics of the Inland Waterway Sector and its Small- and Medium-sized Enterprises, for example by way of a Dedicated Programme for the Inland Waterway Sector

A4.93 The inland waterway sector is a specific sector characterised by limited volumes and which is geographically also limited in scope. The sector has accounted for less than four per cent of all freight transport in each year that the Marco Polo programme has been in operation.\(^71\) The vast majority of inland waterways are located in northern Europe, with a comprehensive network in existence within the Benelux, France and Germany. The Danube provides a link with some of the new Member States but few inland waterways are present in southern Europe and Scandinavia.

A4.94 The current Marco Polo programme has shown that it is possible within the context of a more general programme to take into account the specificities of the inland waterway sector. In particular, the amended Marco Polo II Regulation has introduced a number of measures intended to favour the inland waterway sector, such as the lowering of the thresholds for this sector and more generally the measures to stimulate the implication of SME’s. Furthermore, the political priority given to inland waterway further stimulates the participation of the sector the programme.

A4.95 It is too early to judge how successful these measures have been but the fact that it is possible to incorporate the specificities of different transport modes within the existing Marco Polo programme indicates that a dedicated Marco Polo programme for the inland waterway does not appear to be justified. Indeed, introducing a specific programme for inland waterways would lead to a fragmentation of funds and support instruments, which would be to the detriment of a coherent transport policy.

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\(^{71}\) EU energy and transport in figures: Statistical pocketbook 2010
The Possibility of Extending the Programme to Neighbouring Countries

A4.96 Article 4 of Regulation (EC) 1692/2006 establishing the second Marco Polo programme stated, following the 2009 recast, that eligible applicants for the programme are:

“undertakings or consortia established in Member States or participating countries, as provided for in Article 3(3) and (4).

Undertakings established outside the participating countries referred to in Article 3(3) and (4) may be associated with a project, but may under no circumstances receive Community funding under the Programme.”

A4.97 The definition of a participating country, as specified in Article 3(3) and (4) is:

(a) “countries which are candidates for accession to the European Union. Participation shall be governed by the conditions laid down in the Association Agreements with those countries, and on the basis of the rules laid down in the decision of the Association Council for each country concerned.”

(b) “EFTA and EEA countries and close third countries, on the basis of supplementary appropriations in accordance with procedures to be agreed with those countries.”

A4.98 Hence, the Regulation already permits undertakings from close third countries to participate in the Marco Polo programme and to receive Community funding, on the condition that the close third country is a participating country. Hence, if a close third country is not defined as participating (and thus does not contribute to the Marco Polo budget) it cannot receive funds under the programme, but may be associated with a project.

A4.99 The possibility to extending the programme to neighbouring countries has the benefit of increasing the likelihood of participation in the Marco Polo programme for undertakings based in Member States located on the EU frontier. On the other hand, this involves European funds leaving the EU and, other than where a specific agreement is signed and additional funding is provided by the close third country, it is questionable whether or not Marco Polo should be subsidising undertakings based in countries that have not provided finance to the programme.

The Possibility of Further Adapting the Programme to the Insular and Archipelagic Member States

A4.100 Under the current rules of the Marco Polo programme, while eligible international routes for actions other than common learning actions should connect two eligible countries, it is permitted to achieve modal shift / traffic avoidance in only one of these countries. This rule permits insular and archipelagic Member States to participate in the Marco Polo programme since it allows the modal shift / traffic avoidance to be achieved in another Member State. It is understood that a more restrictive interpretation has been adopted in recent years but it is advised to revise this approach in order to enable the insular and archipelagic Member States take greater benefit of the programme.
A4.101 At present, there is limited incentive for certain Member States to participate in the programme as it is not possible to achieve modal shift / traffic avoidance within their geographical boundaries. A solution to this problem would be for the Marco Polo programme to shift away from its current focus on modal shift / traffic avoidance and to instead focus on reducing the external costs of transport. Such a policy could, for example, compensate undertakings from the insular and archipelagic Member States for switching to a more energy efficient transport unit without changing transport mode (e.g. by switching from a high-emission vessel to a low emission vessel).