LOT No: 2 TRANSPORT AND INFRASTRUCTURES

FRAMEWORK CONTRACT

TECHNICAL ASSISTANCE FOR THE EVALUATION OF TRANSPORT SECTOR IMPLEMENTED AND FINANCED BY IPA PROGRAMME AND OTHER DONORS IN THE REPUBLIC OF SERBIA

FINAL EVALUATION REPORT

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An EU funded project managed by the Delegation of the European Union to the Republic of Serbia

The project is implemented by:

PLANET

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Contents

LIST OF ABBREVIATIONS AND ACRONYMS

AIS	Automatic Identification System
BC	Beneficiary Country
CAD	Civil Aviation Directorate
CARDS	Community Assistance for Reconstruction, Development and Stabilisation
CDA	Czech Development Authority
CFCU	Central Finance and Contracting Unit
CoS	Corridors of Serbia
DIS	Decentralised Implementation System
EAR	European Agency for Reconstruction
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECAA	European Common Aviation Area
EIB	European Investment Bank
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMU	Electric Multiple Unit
ENC	Electronic Navigation Chart
EU	European Union
EUD	European Union Delegation
EUR	Euro
EURc	Euro cents
EURm	million Euros
FDPS	Flight Data processing System
FIS	Fairway Information System
FYROM	Former Yugoslav Republic of Macedonia
GDP	Gross Domestic Product
GMPT	General Master Plan for Transport
GoS	Government of Serbia
IFI	International Financing Institution
IMAS	International Mine Action Centre
IPA	Instrument for Pre-Accession Assistance
IWT	Inland Waterway Transport
JSC	Joint Stock Company
LAP	Legal Action Plan
LFA	Logical Framework Analysis

MIFF	Multi-annual Indicative Financial Framework
MIP	Multi-annual Indicative Programming
MIPD	Multi-annual Indicative Programming Document
MIS	Management Information System
MoT	Ministry of Transport
MS	Member State
NAD	Needs Assessment Document
NPI	National Plan for Integration with the EU
NPV	Net Present Value
ODA	Official Development Assistance
OCL	Overhead Contact Line
OVI	Objectively Verifiable Indicator
PE	Public Enterprise
PIU	Project Implementation Unit
PLOVPUT	Inland Waterways Directorate
RIS	River Information System
RMS	Railway Management System
RPF	Resettlement Policy Framework
RTA	Resident Twinning Advisor
SAA	Stabilisation and Association Agreement
SWAp	Sector-Wide Approach
SEETO	South East Europe Transport Observatory
SEIO	Serbian European Integration Office
SR	Serbian Railways
SSP	State Safety Programme
TA	Technical Assistance
TEN-T	Trans-European Network - Transport
TNA	Training Needs Assessment
ToR	Terms of Reference
UXO	Unexploded Ordnances
veh.km	vehicle kilometre
VTTS	Vessel Tracking and Tracing Service
WBIF	Western Balkan Investment Framework

EXECUTIVE SUMMARY

1. This project is designed to assess the relevance, effectiveness, efficiency, impact and sustainability of ODA to Serbia for the period 2007-2011 and covers IPA, IFIs and bi-lateral donors. It aims to provide a framework for future decision-making with regard to the design, programming, implementation and evaluation of financial assistance based upon the lessons learned from past experiences and best practice; and to formulate policy objectives and indicators for future assistance that are both measurable and implementable. The project was carried out by Planet S.A from Greece and took place between March and June 2013.

2. The volume of IPA assistance to the transport sector in Serbia for the period 2007-2011 amounted to €83.34 million, of which €68.90 million has been contracted to date. IFI assistance comprised funding from the EIB, EBRD and the World Bank. Loans from the EIB amounted to €905 million with the total amount disbursed to date being €109.30 million. The EBRD's budget amounted to €430 million of which only €90 million has been disbursed to date, whilst that from the World Bank amounted to some $388 million of which some $25 million has been disbursed. Of the bi-lateral donors funding transport projects in this period, the Hellenic Plan has provided grants of some €70 million whilst the Czech Government provided €1.5 million and the Chinese Government some €300 million, most of which has been for the Zemun Bridge.

3. In terms of **Relevance** and the overarching aim of accession to the European Union, almost all projects are aligned with this goal. Underpinning the focus of funding has been the concentration on developing Corridor X as a key artery as part of the TEN-T Pan-European Transport network, which is considered the key priority that will act as the backbone of economic development in the country as a whole. In this respect, there has been complementarity in funding amongst the donors, with the IPA providing funding for supervisory contracts, as well as assistance to the PIU of Roads of Serbia and assistance with feasibility studies. It has also provided funding for the supervision and construction for the Zezelj bridge over the Danube at Novi Sad at a cost of €28.18 million. Corridor X consumes over half (€579 million) of the allocated budget of the EIB for the Motorway Phase 1 Nis-Cifilk and the E-75, all of the World Bank budget for this period ($388 million) and €150 million from the EBRD for the K10 from Nis to Dimitrovgrad. The EBRD also has a project to provide rolling stock for Corridor X valued at €100 million. This has been complemented with bi-lateral funding for Corridor X from the Hellenic Bank for two sections at a cost of some €70 million. EIB funding for the Gazela bridge in Belgrade together with the Belgrade bypass form important links into this network. EIB funding of the Sava bridge, however, does raise questions over its relevance to EU accession objectives.

4. IPA funding has also been relevant with respect to support to Corridor VII, one of the other Pan-European Corridors with its focus on the Danube River. Funding for the development of River Information Services, the removal of unexploded ordnances (UXOs) at Prahovo and the preparation of documentation for river training are all designed to enhance navigation on this key artery as part of the broader goal of developing a major waterway link between the North Sea and the Black Sea. IPA has also funded projects critical to the accession process, focusing on legislation with the Harmonisation of the Acquis Phase II building on a previous twinning programme and drafting laws and bylaws critical to the transport sector; and support to the European Common Aviation Area (ECAA) considered vital to meeting the compliance criteria set down for the transitional periods. Finally, assistance to the

development of intermodal transport has been instrumental in assessing the viability of developing a terminal near Belgrade.

Overall, **Relevance** is rated as **highly satisfactory.**

5. The questions that address **Efficiency** relate to whether the projects were cost effective and how economically resources were converted into results. A majority of the IPA projects provided technical assistance or construction supervision. There were several projects that related to construction or supply, most significantly the steel structure for the new Zezelj bridge in Novi Sad. There was a single twinning project that related to the harmonisation of the transport acquis. The IFI projects mostly concern loans for the construction of road infrastructure, with some investment also in railway rolling stock. However, several of the road infrastructure projects include elements of technical assistance and construction supervision. Bi-lateral funding contributed predominantly to construction projects. Overall, the modality selected was appropriate and no specific case was identified where an alternative modality might have been preferable. However, the efficiency of projects varied considerably, with the supervision and TA projects tending to be satisfactory and the construction and implementation projects being less satisfactory. Given the greater financial value of the construction projects, the overall efficiency tends towards less than satisfactory.

Many of the contracts are linked to, aligned with and complementary to other contracts. In some cases they are linked in parallel (e.g. a construction supervision contract financed by one donor for a construction project financed by the same or another donor; co-financing of separate elements of a single project); in others they are linked in series (e.g. construction of several adjacent sections of motorway). In the case of the Corridor X motorways, the linkages are complex, with several donors interacting through multiple construction, construction supervision and technical assistance contracts, indicating a high level of complementarity and cooperation.

Given that the major proportion of infrastructure investment is loan-based albeit concessionary, there is a clear need to utilise these funds most efficiently. Unfortunately, this has not been the case and a huge back–log has occurred in disbursements and project completion for IFI –funded projects. These include:

- Belgrade bypass (2007): €14 million disbursed out of €60 million allocated. (EIB)
- Corridor X (E-75): No disbursement of €314 million allocated. (EIB)
- Belgrade Bypass (2010): €16 million disbursed of €40 million allocated. (EIB)
- Corridor X Motorway Phase 1 (Nis-Ciflik) (2010): €17.30 million disbursed of €265 million. (EIB)
- Supply of EMUs to Serbian Railways (2009): €1 million disbursed of €100 million. (EBRD)
- K10 from Nis-Dimitrovgrad (2009) €24.54 million disbursed of 2150 million (EBRD).
- Supply of Rolling Stock (2010); €1 million disbursed of €100 million (EBRD)

Even the Hellenic Bank has encountered major problems with the construction of the section Donji-Neradovac to Levosoje on Corridor X. This has caused a massive backlog in the disbursement of funds and the case of EBRD projects incurred costs amounting to some €2 million due to the delays.

6. Reasons for these delays include the following:

- Weak project identification, preparation and implementation
- Contractual problems between contractors and financiers
- Poor and deficient documentation
- Delays in the issuing of construction permits

- Delays in planning approvals
- Problems with land expropriation and the failure of the GoS to make adequate provisions for these.
- Weak feasibility studies with over-optimistic traffic forecasts and the failure to provide for adequate maintenance costs

Overall, **Efficiency** is rated as **less than satisfactory**.

7. **Effectiveness** considers the extent to which assistance has achieved its objectives. Of the projects that have been completed, there is a wide range in their effectiveness. Some have achieved (or are achieving) their objectives satisfactorily while others are unsatisfactory. Particularly unsatisfactory is the construction of the Zezelj Bridge project, although the problems are more to do with contractual issues and unexpected problems than failings of the assistance itself. The objective of the supervision is to ensure that construction is completed on time and on budget. Construction should by now have been about 50% complete but by the end of May 2013 was in fact only 15% complete. Whilst the fabrication of the steel structure funded by the EU has shown a marked improvement since the initial evaluation at thend of May 2013, extensive delays are nevertheless with civil engineering aspects and contractual disputes have caused considerable delays. The effectiveness of support is, therefore, dubious in this case.

The assistance generally has a satisfactory balance between stakeholders, and in some cases the relationship between stakeholders is complex.

Cross-cutting issues are not relevant to all projects, but where they are relevant they have been considered with varying degrees of success. Environmental issues have generally been adequately dealt with since the major infrastructure projects required that an EIA be carried out.

The infrastructure construction projects will have an impact on regional and local development, the “soft” projects less so, except where they facilitate the “hard” projects. The development of Corridor X especially is likely to result in nodes of development around major intersections. Much emphasis is placed on attracting transit traffic to the route through Serbia, but transit traffic in itself should not be seen as a benefit - it adds to congestion, pollution and the cost of infrastructure maintenance, while putting little into the economy. However, if an efficient transport network is developed it will lead to regional development nodes that could potentially attract foreign business.

The spontaneous settlements of minorities have caused issues with several infrastructure projects, delaying their implementation due to lack of progress in adopting resettlement plans. This has been a particular issue with the Sava bridge and the Belgrade bypass, where the failure to relocate a large Roma settlement has led to significant delays to construction of the northern access roads. It was also an issue with the reconstruction of the Gazela Bridge in Belgrade. The issue of resettlement has been explicitly addressed by the World Bank in Corridor X through the preparation of a Resettlement Policy Framework that was adopted by all partners.

Overall, **Effectiveness** is rated as **satisfactory.**

8. The evaluation questions that consider **Impact** are closely related to the logical framework matrices. As such they examine the immediate results, the strategic objectives, and indicators. Specific reference is made to reconstruction and reconciliation, transport safety and accessibility. The questions also address the visibility of projects and the specific impact on transport safety and accessibility.

The project fiches and more specifically the logical framework matrices are often poorly prepared. As projects have matured they have not been updated to take account of changes. Some refer to projects that consist of several components, which would benefit from having their own sets of indicators.

Not all the projects are completed and many projects are experiencing significant delays. These mean that for some projects the expected benefits have not yet materialised. There appears to be a particular

problem with the construction of the Zezelj bridge, where the contractor apparently won the contract on the basis of a low price. Construction of the access roads to the Sava bridge has also encountered serious delays due to issues of resettlement and the project is thus not yet generating all the benefits expected. The RIS project has only just been completed and should have a significant impact on navigation once operational, although delays have been encountered due to lack of funding for maintenance and the absence of internet contracts. There have also been concerns that the UXO project has not fully realised its objectives.

It is expected that most of the projects will impact on the overall strategic goals of the sector, once they are complete. Clearly, some will do so to a greater extent, but there are none that will not do so. The project that appears to contribute least is the Sava bridge, a highly expensive project that contributes relatively little to strategic goals and has not had the desired effect on the relief of congestion.

A few projects - rebuilding of the Zezelj bridge, removal of unexploded ordnances - are directly related to reconstruction and reconciliation. Others are less directly relevant but contribute nevertheless. These include projects that contribute to the backlog of work required due to the fact that during the years of sanctions and conflict, infrastructure was not developed or maintained. Consequently, the condition of the infrastructure deteriorated. Several projects have few or no links - RIS, ECAA, harmonisation and the Sava Bridge.

Apart from the World Bank Corridor X projects, most of the indicators are poorly specified or non-existent. Many are unsuitable or imprecise and few are SMART. Most of the indicators are vague and lack baseline and target values. Very few have a timeframe within which they are supposed to be measured, and some are simply not measurable in the form in which they are expressed

It was found that most projects follow EU guidelines with regard to visibility during project implementation, but are not achieving maximum visibility of strategic objectives and results.

Most of the projects will impact on transport safety and accessibility, some directly (e.g. through high quality new construction; inclusion of specific safety measures), others indirectly (egg. facilitation of new construction, facilitation of maintenance).

Overall, **Impact** is rated as l**ess than satisfactory.**

9. The question of **Sustainability** relates predominantly to the degree to which an appropriate administrative and institutional framework has been established and whether the financial capacity is in place to ensure the continuation of benefits.

At a broad level, the changeover to DIS at the end of the year will introduce the decentralised management of projects. This will place considerable burdens on the relevant IPA units in the Ministries, which may not have sufficient trained staff to manage the increased volume of work. With respect to project preparation, there is an acute shortage of expertise in this field and donors are reliant on outside agencies to prepare documentation and feasibility studies. Studies tend to be weak in areas such as market analysis and cost-benefit analysis. The capacity to appraise projects from an economic and social perspective are distinctly lacking.

With regard to the administrative and institutional framework to support specific projects, companies like Roads of Serbia have adequate well-qualified staff and a low turnover. However, this situation may change as the private sector expands. Other companies such as Serbian Railways are extremely overstaffed and some rationalisation is urgently needed. Several of the ODA projects had as one of their core elements the training of staff in the beneficiary institutions.

Maintenance of infrastructure is a critical issue for financial sustainability. For Corridor X, it is envisaged that existing tolls will provide for maintenance costs and loan repayments. However, increasing transit traffic (especially HGVs) will lead to increased maintenance requirements, the costs of which may not be covered by forecasted revenue estimates. One of the focuses of the current World Bank assistance programme is the development of an overall maintenance model that can be universally applied.

Certain problems have been encountered with the operation of the RIS with respect to operation and maintenance of the system including insurance and internet costs. Unless adequate funding is provided, then the system may need to be shut down (as at present).

Overall, **Sustainability** is rated as **less than satisfactory.**

10. In terms of **Strengths**, the following have been identified:

- **Complementarity**. There has been a clear alignment in approach by the various donors with a clear focus on Corridor X (Road and Rail). Whilst IFIs have been instrumental in providing most of the loan financing, IPA has provided a range of softer measures to support these investments including supervisory projects, technical assistance and assistance with feasibility studies. The only departure from this is the supervision and construction of the Zezelj bridge.
- **Balance of Funding**. IPA funding has been balanced amongst the transport modes with assistance to the road, rail, IWT, aviation and intermodal sectors together with horizontal projects covering all sectors focusing on improving the regulatory framework to underpin the requirements of the acquis and to harmonise legislation. By contrast, there has been no IFI interest in the IWT projects with their focus primarily on Corridor X (Road and Rail) and bridge construction. Bi-lateral funding in this period was also concentrated on Corridor X (Hellenic Plan) or on the railway crossings (Czech Government).

11. Key Projects. In terms of key IPA projects, the Harmonisation of the Acquis Phase II was probably the most successful in terms of achieving its overall objectives and impact with a large number of primary laws and bylaws drafted affecting all sectors. Support to the CAD in meeting the requirements for ratifying the ECAA were also a vital element in harmonising legislation in the Aviation sector. RIS has also succeeded in establishing a sophisticated River Information Services, whilst the support to the intermodal project was vital in terms of assessing its viability and identifying core institutional arrangements needed.

Most of the supervisory projects have performed and support to the PE Roads of Serbia with a PIU was effective in strengthening the capacity of this important institution.

With respect to IFI and bi-lateral funding support to the completion of Corridor X has been fundamental to developing a strategic backbone for the transport sector , which will have major impacts on development in the country as a whole.

12. In terms of **Weaknesses**, the following have been identified:

- **Overconcentration**. Investment in Corridor X has been to the detriment of investment in other transport modes and in other economic sectors. Whist the Corridor will provide the backbone for a much more dynamic transport sector, funding of the other Pan-European Transport Corridor VII has been neglected by the IFIs in the light of investment cost required to upgrade infrastructure and the requirement for complementary programmes to be developed in other countries. Questions also need to be raised about the financial sustainability of Corridor X given the huge operational and maintenance costs and the requirements for loan repayments.
- **Delays**. Protracted delays in the completion of projects has been a key feature of assistance in the period 2007-2011. This is particularly the case where construction projects are involved but also applies to supply contracts. For the EIB, out of a total funding budget for the period 2007-2011 of €905 million, only 12% has been disbursed to date. For the EBRD, only 21% of the €430 million earmarked for the transport sector has been disbursed. For the World Bank, the figure is 7%. For the only construction project funded by IPA (the Zezelj bridge at Novi Sad), only €6.8 million has been disbursed by the end of May 2013. The cause of delays include problems with land expropriation, issuing permits, lack of project preparation and poor design; disputes amongst contractors; under-pricing etc.
- **Sustainability**. The concern here is whether the appropriate financial mechanisms are in place at the national level to ensure that all the construction projects (rail, road etc) are maintained

and operated effectively once donor assistance has ended. Corridor X, for example, will rely on toll revenue to service these costs and repay the loans and the issue is whether the tolls will be adequate. Competition from a revitalised rail sector will also impact on passenger and freight traffic. Sustainability also applies to the administrative and institutional framework since the transition to DIS in the near future will place a considerable burden on the IPA units in the relevant Ministries.

- **Dilution of Responsibility**. There is also some concern regarding the splitting of Ministerial responsibilities with the Ministry of Construction and Urban Planning now responsible for Corridor XI and Corridors of Serbia responsible for Corridor X with Roads of Serbia responsible for operational and maintenance aspects.
- **Financing**. Given the magnitude of funding required to rehabilitate the transport sector (ca €15 billion), overall financial sustainability is questionable in the long run with Serbia already above its debt levels and alternative financing mechanisms such as the concession agreement with ALPINA having a profoundly negative effect. Appropriate regulations for the promotion of PPP arrangements appear to be somewhat lacking.

13 On the basis of these findings, broad **sectoral** recommendations are made including:

a) Programming

The movement to a SWAp will require a much more strategic vision in programming, the need for much closer collaboration amongst Ministries and the reinforcement of collaboration with donors. It will also require the introduction of more specific, sector-based indicators that will provide the baseline for the measurement of performance. Much deeper monitoring and evaluation will also be required.

b) Collaboration

Sector Working Groups and Donor Coordination Groups must be strengthened and supported as a part of the sector-based approach. There must be synchronisation in the projects supported. Regular contacts between Ministries and beneficiaries will also be crucial to harmonising policies and actions at the national level and ensuring the move to SWAp.

c) Management

There is an urgent need to strengthen the agencies responsible for the management of EU funds in the light of the transition to DIS and the movement towards SWAp. This will place increasing pressure especially on the IPA Units within Ministries and new staff need to be recruited and project preparation/evaluation skills strengthened. Consideration also needs to be given to establishing a strategy/policy unit within the MoT.

d) Project Selection

Project identification under CARDS and IPA I has largely resulted from the priorities defined in the MIPDs for IPA funding based on the Copenhagen principles and on the NADs developed by the GoS based on a collaborative process with Ministries with accession the overarching theme. IFIs and bi-lateral donors, whilst developing their own country strategies, have nevertheless focused on Corridor X as the target for assistance as part of the overall TEN-T process of developing a strategic rail and road corridor. There is no doubt that the completion of this project will provide the backbone on which more transit traffic can be encouraged but just as importantly, more diverse development throughout the country can be stimulated. It is therefore essential that major obstacles causing delays are overcome quickly.

Completion of these projects, however, has highlighted critical problem areas that need to be resolved in future planning. These include the following:

- Expropriation of land, which has become an increasingly critical issue and imposed a huge financial strain on the GoS.

- Problems with minority groups, where resettlement has caused immense problems especially with respect to the Belgrade bypass and the Gazela Bridge. Failure to take adequate account of these issues has caused extensive delays.
- Difficulties with the issue of permits for land usage with Serbia ranking extremely low in the World Bank's Doing Business profiles of 185 economies.
- Disputes between contractors.
- Under-pricing of projects in the initial bids and the weaknesses in using lowest bidders as the criterion for the selection of contractors.

There is also the issue of project viability and sustainability. Whilst funding from the IFIs (EBRD, EIB and World Bank) is based on sound, independent, cost benefit analysis often with the support of the WBIF, project appraisal skills domestically are weak and primarily technical in focus. Whilst the evaluators were able to examine the feasibility studies of key donor projects, this was not the case for bilateral donors.

Road projects on Corridor X rely very much on toll revenues to fund maintenance and operation, currently estimated at €160 million annually, but it is debatable whether these will be sufficient to cope with the anticipated increase in traffic once the route is fully operational and maintenance costs rise as a consequence.

Since the development of Corridor X also includes the promotion of railways and the shift of freight from road to rail, it is questionable whether attention has been paid to diversionary costs.

Clearly what is required for future programming, especially with the SWAp, is a prioritised pipeline of projects available for implementation, ranked on the basis of key criteria including readiness. For transport projects, this should take due account of all the issues discussed above and of their linkage effect to the promotion of the sector as a whole.

In this respect, Corridor X projects together with the proposed project for promoting intermodal transport need to be linked to the promotion of trade facilitation measures, especially customs procedures on borders, since this will have a major impact on operational efficiency.

Investments in hard measures need to be complemented by soft measures as well if the anticipated benefits are to be realised. This also needs to be linked to the Rule of Law (soon to be split into Justice and Home Affairs with respect to the implementation and enforcement of legislation; and to support to the public administration in the development of an appropriate institutional framework.

With regard to the IWT, over €16 million was provided in the period 2007-2011 for the RIS, the removal of UXOs and the preparation of documentation for river training works. Whilst these are commendable and in line with priorities in the NAD and the overall EU policy of promoting sustainable transport development, the fundamental issue is whether funding is further justified given that traffic flows are so low and there will be a need for huge amounts of investment to promote the use of the Danube. Since the IFIs have shown little interest in this sector and port development is constrained by private ownership, the issue of whether this can still be perceived as a priority is debatable.

There is a need for the further development of criteria for project selection and the development of a rolling plan of projects geared to the SWAp. Critical to the selection will be project readiness, viability in economic and financial terms and potential short and long-term impact. Whilst much of this work is being carried out by external agencies at present, there is a need to reinforce the capacity of the institutions responsible for identifying and managing projects. Training in project preparation and evaluation is essential.

e) Impact

Given that EU budgets are likely to be restrictive in the foreseeable future due to austerity measures, Serbia is likely to be faced with a somewhat static allocation from the EU, although this may rise in the light of the recent accord with Kosovo[1]. Selection of appropriate projects, therefore, will be critical and

[1] This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo declaration of independence

the assessment of potential sectoral impact and multiplier effects will be paramount. Project readiness will be at the core of the decision-making process.

f) Sustainability

The major proportion of funding to the transport sector is from the IFIs and bi-lateral donors with IPA providing support for supervisory work, documentation, legislation etc. The only major investment project is the supervision and construction of the Zezelj bridge at Novi Sad which is crucial to the promotion of the rail Corridor X, although there is an indication that the development of the intermodal terminal near Belgrade will involve an allocation of around €20 million from IPA in 2014.

The issue to address, however, is whether the large number of loans from IFIs and bi-lateral donors is financially sustainable at the global level. Presumably, the Public Debt Administration has some financial model in place that assesses debt repayment obligations over the medium and long–term horizons and this is updated regularly to take account of unforeseen delays. Tolls on the Corridor X will be vital to the maintenance of the motorway but also to the repayment of the loan and the interest due.

Given the enormous amount of funding required to modernise the transport sector, alternative financing models need to be explored including PPP and concession arrangements. There is also an urgent need to ensure that there is adequate maintenance provision for the specific projects and, in the case of Corridor X, the level of tolls are adequate without being uncompetitive. A review of PPP legislation is also needed.

Serbia has already moved towards using ***conditional loans*** and has projects in place with Azerbaijan. for Corridor XI (Route 4), the Peoples' Republic of China for the Zemun Bridge and with the Czech Government for the Nis-Dimitrovgrad rail link. These have the advantage in that they have a much simpler contracting process with contracts signed directly with contractors from the host country obviating the need for lengthy tendering procedures for works and supervision with the proviso that Serb contractors have 45% of the contract. In essence a single package is provided for finance and construction, which should speed up implementation significantly. The downside to these types of arrangements, however, are that they tend to be more expensive in terms of interest rates charged compared with the IFIs as well as there being no competition in securing a contractor and no control over procurement procedures. With respect to developing concession agreements and PPP, there have been problems in the past with some of these and their needs to be more clarity in the legal arrangements underpinning these complemented modification of these laws to provide a more secure environment for potential investors.

g) Monitoring

As part of the process for developing a SWAp, there will be a need for more rigorous monitoring and performance-based indicators, which will determine the continuation of funding and the release of tranches. One of the weaknesses identified in almost all the project fiches for the sample of projects included in the survey were the poor indicators in the Log Frame Matrices. Most were not SMART and had weak OVIs, which were difficult to measure. Most appeared to have been put together as an afterthought and there appeared to be little enthusiasm to use them as real measurements of performance. This is a critical area that needs to be addressed with sectoral indicators providing a baseline upon which to base performance. Section 6.4 attempts to provide such indicators assuming a SWAp.

More detailed training needs to be provided on Logical Framework Analysis (LFA) and on the development of sound and realistic performance indicators. This is an urgent need since it will underpin the preparation of future Project Fiches. In view of the fact that there appears to be have been little in the way of modification of the LFA once the projects have been contracted, the need for the re-working of the log frame matrices needs to be reinforced.

Although there are plans to develop a more sophisticated information system, this should be treated as a matter of urgency and a more interactive and user-friendly management information system installed as soon as possible to support the introduction of the SWAp. Training in its use will also be essential for all relevant Ministries and agencies.

h) Modalities

Most projects were funded under service and supply contracts, the exception being the construction of the Zezelj bridge. The project for Harmonisation of the Acquis II utilised twinning as the modality, as did the previous harmonisation project. Whilst the first was with Austria and Germany and had certain fundamental weaknesses, the second was with France and Lithuania, although it involved Austrian, Slovenian and Finnish experts. There have been numerous twinning projects in Serbia and the Western Balkans funded by IPA, and DG Enlargement undertook an evaluation of the merits of both approaches in its study "Twinning versus Technical Assistance", produced by Ecorys in January 2011.

Certainly the feedback given by the MoT was that the reason for the choice of twinning rather than TA was that their project was *acquis-related* in that it focused on the harmonisation of key legislation affecting the accession process and therefore required in depth knowledge from experts from established and new EU Member States. The choice of France with many years experience in managing twinning projects together with a new Member State that had gone through the process of harmonisation provided the appropriate blend and concurred with the objective of institution strengthening. The DG Enlargement report concluded that they had not found any significant differences in the performance of either twinning or TA projects and the crucial criteria for the choice of modality were the issues of institution strengthening and whether or not the project was acquis related.

Whilst some would argue that twinning is too invasive and that experts tend to work alongside the local side on a daily basis, others suggest that TA is by its very nature evasive and somewhat distant and detached from the real needs of the beneficiaries. Whichever modality is used, it really comes down to the quality of the staff employed and their ability to interact with local experts. In particular, the choice of Project Manager/Team Leader for TA contracts or Resident Twinning Adviser (RTA) for twinning is vital, as are the key experts. Interviews need to form an integral part of the evaluation process, especially on long-term contracts. In the case of the twinning project for the Harmonisation of the Acquis, the choice of Team Leader was fundamental to the success of the project since he interacted well with the staff of the Ministry and provided the dynamism to inspire staff.

The critical issue to the success of the project, however, whether it be twinning or TA, is the quality and knowledge of the technical team and the commitment and expertise of the counterpart staff. It is essential therefore that experts are properly evaluated and interviews are an essential element in the selection process.

14. Project specific issues have also been identified with recommendations made for both infrastructural and technical assistance projects:

Table A.Summary of Findings and Recommendations

	Findings	Recommendations	Responsibility	Deadline
Sectoral Issues				
Programming	2007-2011 Project focused with annual programming Commitment to Copenhagen criteria Diffuse strategies, priorities and procedures of donors	Movement to SWAp to create greater inter-ministerial coordination, focused strategic objectives, closer co-ordination with donors. Multi-annual planning to reduce time constraints. Need for much more strategic vision in programming. Need for much greater inter-Ministerial collaboration,	MoT, SEIO,	Urgent

		Need for more specific, sector based indicators.		
Collaboration	Development of Donor Coordination Groups and Sector Working Groups significantly improved inter-Ministerial and inter-agencty collaboration	Need for more effective coordination amongst donors and reinforcement of collaborative mechanisms especially amongst Ministries.	SEIO, MoT, IFIs, bilateral funders	Short term
Management	Movement to decentralised mangement (DIS) to provide for greater autonomy	Need to reinforce local structures especially IPA Units at key institutions.	EUD, MoT	Urgent
Project Selection	Lack of project readiness	Need to undertake much more detailed project appraisal based on project readiness.	SEIO, PPF facility, MoT	Short Term
	Inadequate appraisal of project impact at sectoral level	Link to introduction of SWAp with key criterion for project selection being sectoral impact.	SEIO, PPF facility, MoT	Short Term
	Absence of rolling plan of projects	Development of package of projects that meet key sectoral needs and prioritised on basis of kety criteria.	SEIO, PPF facility,MoT	Short Term
	Deficient economic and financial appraisal	Support to developing local appraisal capacity	MoT	Medium term
Financial Sustainability	Overdependence on traditional financing models.	Evaluation of alternative financing models including concessional and PPP arrangements; and conditional loans	MoT, SEIO	Medium term
		Assessment of legal frameworks for alternative financing models and recommendations on amendments needed	SEIO, MoF, MoT	Medium term
Monitoring	Need to develop a new and integrated Management Information System for Project Monitoring/Evaluation	TA to upgrade INDASCON information system	SEIO	Urgent
		Reinforcement of Monitoring/Evaluation Capacity at MOT and key agencies	MoT	Urgent
		Development of sector-based indicators to provide baseline for future performance.	MoT/SEIO	Urgent
Project Issues				

Infrastructural projects				
b) Technical	Weak technical evaluation of projects	Strengthen technical capacity, quality and independence of evaluation committees.	MoT	Short term
	Contractual difficulties	Need to resolve current problem at Zezelj bridge with respect to disputes over unforeseen obstacles Continuing support for supervisory contracts by EU.	MoT	Urgent
	Design Problems	Strengthen design capacities at key institutions Link to feasibility studies	CIP, Road and Rail Directorates	Medium Term
	Resettlement Problems	Adoption of World Bank Resettlement Policy Framework for exisiting and future projects Focus on resolving issues at Sava Bridge and Belgrade bypass.	IFIs Bilateral donors	Urgent
	Lack of Planning approval and problems with land expropriation	Resolve issues with respect to: a) Second Section of Corridor X funded by Hellenic Bank from Donji-Neradovac to Levosoje. b) Access roads to Zezelj Bridge Streamline approval procedures c) Corridor X projects	EIB, EBRD, World Bank,MoT	Urgent Urgent
b) Institutional	Dilution of Ministerial Responsibilities	Ensure synergy and complementarity in approach	MoT, Ministry of Construction and Urban Planning	Medium term
	Strengthening technical and planning capacities	Provide training in project planning, strategic planning and CBA	MoT, SEIO	Medium Term
c) Financial/Economic				
	Weak Feasibility Studies (Zezelj Bridge, Sava Bridge)	Independent assessment of studies needed. Continuation of support from WBIF and PPF facilities.	IFIs, WBIF, PPF	Medium term Short Term
	Inadequate project appraisal expertise	Develop capacity in project appraisal/CBA in key institutions through seminars, in house training etc.	MoT, SEIO	Medium Term
	Problems with provision of maintenance and	Completion of World Bank Maintenance model and application to on-going and	World Bank, MoT	Short term

	on-going operational support	planned infrastructural projects. Continuous monitoring of financial provisions. Resolution of issues with respect to support to RIS. Establish maintenace provision and operational support as pre-condition for project funding.	MoF, MoT MoT, MoF, PLOVPUT	Medium Term Urgent Short Term
	Project Financing Issues	Resolution of problem with respect to financing of Novi Sad-Stara Pasova railway. Establish protocol. Evaluation of alternative financing models (concessionary finance/PPP) and conditional loans.	MoF, MoT, SEIO SEIO/MoT/MoF	Short Term Short Term
Technical Assistance Projects				
a) Institutional Issues	Suspension of Project to restructure railways	Need to implement asap and to move forward with restructuring as key element in acquis accord. Support needed to strengthening new institutions in amanagement and technical areas.	MoT, JSC Serbian Railways	Urgent
	Weaknesses in intermodal capacity at MoT	Increased staffing and development of capabilities to support intermodal project.	MoT	Medium Term
b) Economic Issues	Need to develop inter-sectoral linkages	Intermodal project needs to be linked to measures to improve trade faciltation and harmonisation of customs laws in neighbouring countries.	MoT Customs Administration	Medium term

14. On the basis of the recommendations, Policy Objectives have been developed with respect to future funding. They have been grouped into three key areas and are set out in the following paragraphs. They refer back to the identified weaknesses that are discussed in more detail in preceding paragraphs. They relate primarily to three critical areas:

a) Institutional strengthening

b) Legislative support

c) Further development of infrastructure

With respect to Institutional Strengthening, there are numerous areas where assistance is needed with respect to capacity building aligned to the needs of the accession process. These include strategic planning, project preparation, project monitoring, financial co-ordination, capacity building with respect to DIS, restructuring, reform of customs etc.

With respect to Legislation, additional assistance is needed in the further harmonisation with the acquis but critical to the implementation of these laws and bylaws is the need to focus on enforcement, the

reinforcement of regulatory bodies and capacity building at key institutions were legal skills are lacking. A vast array of laws has been approved in recent years but institutional structures are very weak.

With regard to infrastructural development, future policies should be re-oriented as major investments are completed and focus on secondary networks that provide access to local markets and customers and stimulate greater local and regional development; on maintenance of the new and upgraded infrastructure; and increasing support to safety in line with new World Bank, EBRD and EIB initiatives.

Quite apart from the re-focusing of work towards secondary roads as the key road transport corridors are completed, the emphasis should be placed on the enormous demands of improving the quality of the railways to improve speeds. A core element in this will be the restructuring programme and the promotion of private sector involvement in the operation of the railways.

The development of intermodal transport will also be a high priority and steps need to be taken to move the project proposed for the outskirts of Belgrade forward.

For IWT, further assistance is needed to improve navigation on the Danube both in the removal of UXOs, river training works and the removal of the sunken vessels from World War II. These will be core elements in improving navigation. The key issue, however, is addressing the factors that impede the development of the waterways as strategic transport arteries and this will require extensive amounts of financing which is not as yet forthcoming from the IFIs due to low traffic volumes, lack of infrastructure and the failure to develop a cohesive strategy with neighbouring countries that would make the IWT competitive.

15. There is a need to develop measurable indicators as a key tool in the monitoring process. This is particularly urgent since most of the Project Fiches examined were very weak in this area. In terms of developing appropriate indicators, there needs to be a clear statement of the purpose and objective(s) of the programme/project, the measurement being applied, the baseline upon which to base performance and the proposed targets over a specific timeline, in this case 2014-2020. Realistic targets need to be set and there must be a range of verification sources, which can be used to measure compliance.

16. A table of proposed indicators has been included in Section 9 linked to the specific policy objectives.

1 INTRODUCTION

The framework contract for the project 'Technical Assistance for the Evaluation of Transport Sector implemented and financed by IPA Programme and Other Donors in the Republic of Serbia' was awarded to Planet S.A of Greece in March 2013.

The key objective of this evaluation is to maximise the impact of financial assistance in the Transport sector in the Republic of Serbia from the European Union and other IFIs and bilateral donors.

The specific objectives of the evaluation are to:

- Assess the relevance, efficiency, effectiveness, impact and sustainability of ODA assistance to the transport sector in the period 2007-2011. This covers projects financed and implemented by the European Commission's Instrument for Pre-Accession Assistance (IPA) together with funding provided through bilateral donors and IFIs in Serbia and concessional loans where the grant element is at least 25%.
- Provide a framework for future decision-making with regard to the design, programming, implementation and evaluation of financial assistance based upon the lessons learned from past experiences and best practice.
- Formulate policy objectives and indicators for future assistance that are both measurable and implementable.

2 MAPPING OF ASSISTANCE

2.1 The strategy and policy context

The overall goals of transport policy in Serbia are set down in *The Strategy of the Railway, Road, Inland Waterway, Air and Intermodal Transport Development in the Republic of Serbia (2008-2015), which* was adopted by the Government of Serbia (GoS) in 2008. This document incorporates the principles of EU Transport Policy, the requirements of the Stabilisation and Association Agreements (SAA), the Community Strategy Guidelines on Cohesion, the National Plan for Integration with the EU (NPI) and the Multi-Annual Indicative Financial Framework (MIFF) 2007-2013.

The General Master Plan for Transport (GMPT) in Serbia adopted in 2009 provides overall transport models and a comprehensive list of future investments to 2027 designed to improve the efficiency and sustainability of all modes (road, rail, IWT, aviation, multi-modal) in the transport sector. It also identifies specific training needs to develop human resource capacity. This provides a framework for future investment planning in the transport sector in Serbia and identifies funding requirements both by the national authorities and by the IFIs and bi-lateral donor community.

The National Plan of the Republic of Serbia for Road and Railway Infrastructure Development adopted in 2008 sets out key activities for the road and rail corridors for the period 2008-2012 and also identifies financing requirements (€2.9billion).

The European Union granted Serbia the status of Candidate Country on the 1st March 2012 on the basis of the Commission Opinion on Serbia's membership application in October 2011. The Council concluded on the 5th December 2011 that the opening of accession negotiations would be considered by the European Council, in line with established practice, once the Commission had assessed whether Serbia had achieved the necessary degree of compliance with the criteria for membership. In particular the key priority was the steps taken towards a visible and sustainable improvement of relations with Kosovo in line with the conditions of the Stabilisation and Association process. On the basis of the agreement on the 22nd April 2013 between Serbia and Kosovo on the normalisation of relations between the two countries, the EC has recommended that talks be opened on EU Membership status for Serbia.

Serbia participates in the Stabilisation and Association process and the Stabilisation and Association Agreement was signed together with the Interim Agreement on trade and trade related matters in April 2008. This provides the framework for mutual commitments on a wide range of political, trade and economic issues. The Interim Agreement entered into force on the 1st February 2010 and, at the Foreign Affairs Council on the 14th June 2010, Ministers agreed to submit the Stabilisation and Association Agreement to their Parliaments for ratification.

2.2 Funding to the transport sector 2007-2011

2.2.1 IPA

Table 2.1 below provides data on the overall funding by IPA for the period 2007- 2011 indicating modal allocations, budgets, contracted amounts, completion dates and disbursements.

Contracts for the **Road Sector** amounted to approximately **€10.55 million** with the focus primarily on supervision contracts for Corridor X and for the access roads to Zezelj Bridge at Novi Sad. It also provided for support to the PIU for Roads of Serbia.

For the **Rail Sector**, contracts amounted to some **€36.02 million** of which the vast majority (€28.18 million) was for the supervision and construction of the Zezelj bridge. Other significant projects included a System of Analysis of Track Conditions, costing almost €3 million and the preparation of documentation for the proposed railway line form Novi Sad to the Hungarian border (approximately €4 million). An important project focusing on the restructuring of the railways in accordance with EU Directives is currently suspended. In addition, €1.5 million was provided to assist with the preparation of project documentation for the Nis bypass.

For **Inland Waterways,** the amounts contracted were approximately **€16.83 million,** concentrated on the establishment of River Information Services, the removal of UXOs near Prahovo on the Danube and the preparation of documentation for river training and dredging works, which is due to commence soon. Projects included supervisory elements and the provision of equipment.

In the **Aviation Sector,** emphasis was placed on supporting the Civil Aviation Administration (CAD) in achieving compliance with the requirements of the European Common Civil Aviation Area (ECAA) at a cost of almost €2 million.

Almost **€2 million** was allocated for a major study to examine the potential for establishing an **intermodal** terminal near Belgrade and establishing the requisite institutional framework to support this.

Finally, under **Horizontal** projects, approximately €1.5 million was allocated to the second Twinning project focusing on the essential area of harmonising Serbian transport legislation with the Acquis Communautaire of the EU.

In total, some **€68.9 million** were contracted for the Transport Sector under IPA during this period with the overall budget allocation **€83.34 million.**

Table 2.1: IPA funding for the transport sector in Serbia 2007-2011

No	Year	Tender name	Budget Allocation (€)	Contracted Amount (€)	Status	Completion date	Disbursement (€)
		ROAD SECTOR					
1	IPA 2007	Supervision of Belgrade Bypass Section B	3,500,000	1,717,400	Contracted	March 2014	n/a
2	IPA 2008	PIU to Serbian Roads	2,000,000	1,346,100	Completed	15 Dec 2011	807,693
3	IPA 2010	Supervision of Construction Works of Corridor X, E75 Motorway - tunnels Manajle and Predejane	3,100,000	2,443,480	Contracted	Status unknown	0
4	IPA 2010	Supervision of Construction Works of	3,200,000	2,373,720	Contracted	Status unknown	0

No	Year	Tender name	Budget Allocation (€)	Contracted Amount (€)	Status	Completion date	Disbursement (€)
		Corridor X, E75 Motorway - Roads, bridges and interchanges from Grdelica to Vladicin Han					
5	IPA 2010	Supervision of Construction Works of Corridor X, E80 Motorway - Section from Ciflik to Pirot	3,700,000	2,299,440	Contracted	15 June 2016	0
6	IPA 2011	Access roads to Žeželj bridge (works and supervision)	5,500,000	369,700	Supervision contracted	-	0
		RAILWAY SECTOR					
7	IPA 2008	System of Analysis of Track Conditions	3,000,000	2,975,740	Contracted	20 October 2013	1,669,800
8	IPA 2008	TA to Serbian Railways in restructuring of selected fields	500,000	464,800	Contracted	Suspended since 24 Jan 2013	354,558
9	IPA 2008	Project preparation facility (PPF3) Feasibility Study and EIA for Stara Pazova - Novi Sad railway line	450,000	450,000	Completed		n/a
10	IPA 2010 PPF	Project preparation facility (PPF4) Preliminary design for the Nis - Brestovac railway section	To be defined		Under tender		0
11	IPA 2008	Supervision of Žeželj Bridge	2,000,000	1,948,100	Contracted	Nov 2013	Status?
12	IPA 2009	Žeželj Bridge - Rebuilding Serbian infrastructure	26,231,100	26,231,100	Contracted	Nov 2013	6,778,976
13	IPA 2011	Modernisation of railways - Project documentation for the railway line Novi Sad - Subotica - Hungarian border	6,800,000	3,950,000	Contracted	June 2015	Status?
14	IPA 2011	Modernisation of railways - Project documentation for the Nis bypass	1,500,000		Under tender		0
15	IPA 2011	Safety Management System (SMS)	To be determined		Planned under IPA 2012 unallocated envelope		0
		INLAND WATERWAYS					

No	Year	Tender name	Budget Allocation (€)	Contracted Amount (€)	Status	Completion date	Disbursement (€)
16	IPA 2007	River Information Services (TA)	6,000,000	6,400,000	Completed	01 April 2013	6,400,000
17	IPA 2007	Supervision of River Information Services	1,500,000	2,070,155	Completed	27 March 2013	1,797,420
18	IPA 2007	River Information Services (Supply)	3,500,000	2,480,327	Completed	16 April 2011	2,480327
19	IPA 2010	Preparation of the necessary documentation for river training and dredging works on selected locations along the Danube River.	2,000,000	2,196,700	Contracted	10 July 2013	1,669,800
20	IPA 2010	Removal of Unexploded Ordnances (UXO) from the Danube River	3,000,000 works 800,000 supervision	2,896,011.40 works 788,400 supervision	Completed	15 February 2013 15 April 2013	2,422,604.36 709,560
		AVIATION					
21	IPA 2007	ECAA (Civil Aviation)	1,970,507	1,970,507	Contracted	4 May 2011	Fully Disbursed
22	IPA 2011	ECAA (second stage)	700,000	700,000	Planned under IPA 2012 unallocated envelope	-	0
		INTERMODAL					
23	IPA 2008	Facilitation of Intermodal Transport in Serbia	2,000,000	1,998,000	Completed	21 March 2012	1,998,000
24	G2G	Capacity building in the intermodal sector	130,000		Contracted	?	0
		HORIZONTAL					
25	IPA 2008	Harmonisation of the Transport Acquis	1,500,000	1,500,000	Completed	28 February 2013	1,350,000
26	G2G	Capacity building of the Ministry of Infrastructure	130,000		Approved	?	0
27	G2G	Hazardous waste transport	130,000		Approved	?	0
		TOTAL	83,34	69,57			

2.2.2 IFIs

Table 2.2 shows the funding by the European Investment Bank for the period 2007-2011 which amounted to €905 million with the total amount disbursed to date of €212.30 million.

More than half of the amount is concentrated on Corridor X focusing on Phase 1 (Nis-Ciflik) and the E-75, which is budgeted for €579 million. Belgrade Bypass also has a high allocation of some €100 million, as does the Sava Bridge (€160 million). The Gazela Bridge consumed €33 million.

Table. 2.2: EIB funding for the transport sector in Serbia, 2007-2011

Date	Project	Beneficiary	Amount €m	Disbursed €m
29/11/2010	Corridor X Motorway Phase 1Nis-Ciflik (36 kms)	Corridor X Ltd.	265	17.30
29/10/2010	Belgrade City-Sava Bridge	City of Belgrade	90	32
27/9/2010	Belgrade By-Pass	Roads of Serbia	40	16
18/12/2009	Belgrade City Sava Bridge	City of Belgrade	70	70
23/10/2009	Corridor X (E-75)	Roads of Serbia	314	0
19/10/2007	Belgrade By-Pass	Roads of Serbia	60	14
16/7/2007	Gazela Bridge	Roads of Serbia	33	33
16/7/2007	Roads and Bridges Rehabilitation	Roads of Serbia	33	30
		Total	905	212.30

Table 2.3 shows the funding from the EBRD with the budget amounting to €430 million of which only €90 million has been disbursed to date.

Once again, Corridor X (Nis to Dimitrovgrad) features high in the list of projects funded (€150 million), as does the Belgrade bypass (€80 million). Considerable support has also been provided to Serbian Railways for the provision of Rolling Stock and EMUs (€180 million). Disbursements on the latter have been extremely low to date with the GoS facing considerable charges in terms of arrangement fees.

Table 2.3: EBRD funding for the transport sector in Serbia, 2007-2011

Date	Project	Beneficiary	Amount €m	Disbursed €m
1/9/2010	Serbian Railways Corridor X (Rolling Stock)	Serbian Railways	100	1.00
29/7/2009	K10 from Nis - Dimitrovgrad (80kms)	Corridor X Co.	150	24.54
6/5/2009	Serbia Railways (Electrical Multiple Units)	Serbian Railways	100	1.00
2007	Belgrade Highway / Bypass	Roads of Serbia	80	63.37
		Total	430	89.91

Table 2.4 highlights funding from the World Bank in this period, which focused on Corridor X with transport efficiency and safety being key aspects.

Table 2.4: World Bank funding for the transport sector in Serbia, 2007-2011

Date	Project	Beneficiary	Amount $m	Disbursed $m
19/3/2009	Corridor X Highway Project: transport efficiency and road safety on 3 project sections	Corridor X Co.	388	25.33

2.2.3 Bi-Lateral funding

Table 2.5 shows bi-lateral funding for the period 2007-2011.

The Hellenic Plan supported by Greece provided funding for two sections of Corridor X from Donji-Neradovac to Srpska Kuca, part of which is complete and part of which will be finalised by the summer of 2013. The other section has not yet been started (Donji-Neradovac to Levosoje) due to problems with land expropriation.

The Czech Development Agency (CDA) funded the improvement of safety at 10 level crossings.

The Netherlands provided assistance with developing the institutional framework for the carriage of dangerous goods.

The PR of China assisted with the financing of Zemun bridge at a cost of €170 million

Other projects for which funding had been put in place but did not materialise include the following:

- Germany: Modernisation and electrification of Pancevo-Vrsac railway, €45million.
- Poland: Infrastructure, vehicles and equipment, Railways of Serbia, €70 million
- Spain: Procurement of freight/passenger trains, Railways of Serbia, €37 million

In these cases, the credit lines were channelled into other projects, or austerity measures in donor countries necessitated a re-appraisal of funding conditions.

Table 2.5: Bi-Lateral funding for the transport sector in Serbia, 2007-2011

Donor	Project	Beneficiary	Amount
Czech Rep.	Advancement of Safety at Level Crossings	Railways of Serbia	€1.56m disbursed 2009-2011
Hellenic Plan	Corridor X: Donji-Neradovac-Srpska Kuca (8 kms) and Donji-Neradovac-Levosoje (8kms)	Roads of Serbia	€70m 1st part completed July 2013. No progress on 2nd
PR China	Construction of Zemun Bridge		€164.23m disbursed

Bilateral loans concluded since this period include the following:

- **Azerbaijian:** €300 million, Construction of Corridor 11 (Route 4).
- **Czech Republic:** Negotiations on-going for the reconstruction of the railway line from Nis-Dimitrovgrad.
- **Kuwait Fund:** €27 million for upgrading of Belgrade Railway Station (December 2012)
- **Russia:** €640 million for the development of the Serbian Railways (signed January 2013) including:
  - Construction of the second track of the line from Belgrade to Pancevo (16km)
  - Reconstruction of the railway line Belgrade to Bar (border with Montenegro - 200kms)
  - Rehabilitation along Corridor X (111 kms)
  - Construction of the line Valjevo-Loznica (68 kms)
  - Purchase of diesel multiple units.
- **Turkey:** €10 million

2.3 Future Perspectives

Given the focus on strategic Corridors in past ODA, the IFIs have recognised the relative neglect of the broader transport network, especially secondary roads. There is also an increasing realisation that safety aspects have not been adequately addressed either in the design of infrastructure or in the implementation of comprehensive safety programmes across all sectors.

As a result, the EIB has in its operational forecast a project to support *Road Rehabilitation and Safety* (€100 million) focusing on the upgrading of the national road network and increasing the provision of safety measures. This will be co-funded with the World Bank, the EBRD and Roads of Serbia.

The EIB also envisages providing a 3rd Tranche of €80 million to focus on the Belgrade bypass and has funding in place for the railway link between Stara Pazova and Novi Sad, for which a feasibility was prepared with EU funding. This, however, is the cause of some concern at present since it appears that the GoS is likely to fund this railway with loans from Russia, despite the commitment to utilise EU funds.

The EBRD has recently signed a loan with Serbian Railways for a €95 million rehabilitation of Corridor X and an additional loan will be provided for €105 million once the documentation for the section Stalac-Djunis is complete.

3 METHODOLOGY

3.1 Sequencing of the Evaluation

The Inception Phase commenced on the 17th March 2013 with the arrival of the Team Leader, Graham Walker, in Serbia and was concluded with the submission of the report to the EU Delegation on the 28th March 2013. This was subsequently revised in the light of comments from the EUD and SEIO with respect to the Evaluation Questions and approved by the EUD.

The Field Work commenced on the 17th April 2013 with the Second Mission, which lasted until the 26th April 2013. A large amount of data was collected on the strategic and programming framework, on the specific projects included in the sample and on the interface with the IFIs and bi-lateral donors.

A third mission commenced on the 12th May 2013 and ended on the 29th May 2013 with the submission of this Draft Evaluation Report. Each of the projects was evaluated against the specific Evaluation Questions and synthesised into a composite analysis of the effectiveness of ODA and donor and IFI assistance for the period 2007-2011.

A Workshop was held on the 26th June 2013, after which comments were requested by the 2nd July 2013. The Draft Final Evaluation Report was submitted on the 4th July 2013 incorporating the various amendments.

A wide range of comments have been received from the EUD, SEIO and PLOVPUT and these have been incorporated into this document submitted on the 9th August 2013.

The total inputs of the two experts is shown in the table below:

Table 3.1 Expert Inputs.

Name	Mission 1 Inception Phase	Days	Mission 2 Field Work	Days	Mission 3 Field Work/Synthesis	Days	Mission 4 Workshop/ Revisions	Days	Total
Graham Walker Team Leader	17th- 23rd March (Belgrade)	7	17th-26th April (Belgrade)	8	14th–29th May (Belgrade)	14	24th -29th June (Belgrade)	6	35
	25-27 March (UK)	3					UK (2)	2	5
John Miller Senior Evaluator			18th-26th April (Belgrade)	7	12th-29th May (Belgrade)	14	24th - 30thJune (Belgrade)	6	28
							Spain	3	3
		10		**15**		**28**		**17**	**70**

3.2 Approach

The approach to this evaluation involved the following:

a) **Inception Phase**. This took place from March 17th to 27rd 2013 and included initial meetings with key beneficiaries and preliminary data collection. This involved discussions with the programme managers at the EUD, senior officials from SEIO, the MoT and the IFIs (EIB, EBRD, World Bank). A large amount of data was collected from the SEIO project database ISDACON and from a wide range of documents including project fiches, evaluation reports, project reports etc. All of these were reviewed and formed the basis of the Inception Report and the formulation of the Evaluation Questions and Judgement Criteria and Indicators. This report was submitted on the 27th March 2013 and revised in the light of comments from beneficiaries. This part of the mission involved only the Team Leader.

b) **Field Work.** The field work took place in two missions and the Team Leader was joined by a Senior Evaluator, John Miller. The first mission was from the 17th to 26th April 2013 and the second from the 12th to 18th May 2013. This involved detailed discussions with programme managers at the EUD on the specific projects chosen in the sample as well as with Government institutions and the IFIs. Detailed project reports were obtained and analysed to build up a composite picture of performance and effectiveness. A visit to Novi Sad was also undertaken to assess progress on the construction of the Zezelj bridge and to make an appraisal of the quality of service on the railways. Additional visits were made to the Belgrade bypass and the Sava Bridge.

c) **Synthesis** of the findings took place between 19th and 27th May 2013 and a Draft Evaluation Report was produced and delivered to the EUD on the 28th May 2013. The synthesis involved a detailed appraisal of the relevance, effectiveness, efficiency, impact and sustainability of the specific projects in the sample and their overall ranking. The output from these findings was used to provide an overall assessment, highlighting strengths and weaknesses and formulating key recommendations for future assistance.

d) **Finalisation**. A workshop was held on the 26th June 2013 to discuss the comments and conclusions with the various beneficiaries

4 BACKGROUND AND CONTEXT

4.1 Evaluation Questions, Criteria and Indicators

Following the first mission in March 2013, a Draft Inception Report was submitted which included a series of Evaluation Questions to form the basis of the assessment and these were revised in the light of the comments made by the EUD and SEIO.

The Evaluation Questions are included in Annex 1 and show the Judgement Criteria and the Indicators for the assessment as well as their compliance with the questions included in the original Terms of Reference.

4.2 Sample of Projects

Rather than undertaking a composite analysis of all projects, which would not be possible within the time-frame of the evaluation, it was agreed that a sample of projects would be evaluated against the above questions and these are shown below. It was decided to select projects across all transport modes and include horizontal and intermodal projects. A range of works, service and twinning projects was selected. The sample covered a range of projects funded by IPA, the IFIs and bi-lateral agencies. The analysis of the projects was sub-divided between the two experts as follows :

IPA funding

a) Road Sector

IPA 2007	Supervision of Belgrade bypass Section B Completion March 2014	€ 3.5m	JM
IPA 2008	PIU to Serbian Roads Completion December 2011	€ 2.0m	JM

b) Railways

IPA 2008	System of Track Conditions Completion October 2013	€ 3.0m	JM
IPA 2008	Supervision of Zezelj Bridge Completion November 2013	€ 2.0m	JM
IPA 2009	Construction of the Zezelj Bridge Completion November 2013	€ 45.3m	JM

c) Inland Waterways

IPA 2007	River Information Services Completion 2012	€ 6.0m	GW
IPA 2010	Removal of Unexploded Ordnances (UXO) Completion December 2012	€ 3.0m	GW

d) Aviation

IPA 2007	ECAA (Civil Aviation) Completion May 2011	€ 2.0m	GW

e) Intermodal

IPA 2008	Facilitation of Inter-modal transport in Serbia Completion April 2012	€ 2.0m	GW

f) Horizontal

IPA 2008	Harmonisation of the Transport Acquis Completion Feb. 2013	€ 1.5m	GW

IFI Funding

EIB:

2009	Belgrade City, Sava Bridge (Fully disbursed)	€ 70m	JM

EBRD:

2009	K10 from Nis to Dimitrovgrad Corridor X	€ 150m	JM

subsequently combined with:

World Bank:

2009	Corridor X Highway Project Road Safety, road Management	$388	JM

Bi-Lateral Funding

Germany

Modernisation and electrification of Pancevo-Vrsac (state border)	€ 45m	GW

Unfortunately, the latter project for German bi-lateral funding did not materialise as was the case with a number of proposed bi-lateral projects. In view of this, a broad assessment of bi-lateral donors was undertaken as well as more detailed discussion with the staff responsible for the Hellenic Plan on their funding of two segments of the Corridor X.

5 FINDINGS AND ANALYSIS

This section sets out a presentation of the findings according to the evaluation questions mentioned in section 3.2 relating to relevance, efficiency, effectiveness, impact and sustainability. This has been undertaken for each of the projects in the sample list. The overall assessment is contained in Section 6 and draws out the key findings from the project evaluation.

5.1 Road Sector

5.1.1 IPA 2007 Supervision of Belgrade bypass Section B

The project fiche was originally envisaged to relate to the supervision of the construction works of the Belgrade City Road bypass, Section B, Dobanovci to Bubanj Potock, a 37.3km section of motorway. However, only one carriageway of the 5.4km section Orlovaca to Avalski Put was eventually implemented under the IPA programme within PE Roads of Serbia.

The supervision contract with a value of EUR 1.7m was awarded to EGIS International. The works contracts under supervision included the bridges and carriageway, but not the tunnels. The construction of the carriageway was funded through an EIB loan to PE Roads of Serbia.

Furthermore, through IPA 2008 the EU financed a project to assist the PE Roads of Serbia in managing various IFI loans. In particular, the assistance consisted of providing technical expertise to a Project Implementation Unit (PIU) established within PE Roads of Serbia. One of the objectives of the PIU was to monitor the performance of the Consultants engaged by the EU for the abovementioned supervision contract.

Section B5 of Belgrade bypass was opened to traffic in May 2012, some six months ahead of schedule.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport "Roadmap to a single European transport area - towards a competitive and resource-efficient transport system" (2011). As a key link in the Serbian section of Corridor X, the Belgrade bypass is relevant and aligned to several of the 10 goals designed to guide policy actions including:

- development of the TEN-T network
- reduction of road casualties.

The project fiche attempts to set out the relevance of the total Section B of the bypass to the overall strategic goals of EU Transport Policy. It refers to the White Paper and emphasises the high priority on making transport systems more efficient and safer and on achieving a shift of modal split away from road transport. A mid-term review of the White Paper is quoted as indicating that the latter has not been achieved and the fiche implies that this supports investment in the road sector, which is perhaps contradictory. Nevertheless, the project could be expected to contribute to greater efficiency and safety.

Also significant is the country's geographic position, which makes it potentially a key transit country. While transit traffic is not necessarily a benefit in itself, good international transport connections are important to allow trade, industry and tourism to prosper.

The project is located on the Pan-European Transport Corridor X, as well as on the European "E" roads E70 and E75. Additionally, it is included in the South Eastern Axis identified among the five major axes

to connect the EU with its neighbouring countries in the Report from the EU High Level Group "Networks for peace and development - Extension of the major trans-European transport axes to the neighbouring countries and regions".

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The project responds to the following priorities identified in the NPI:

- short term priorities for road transport
    - road safety
- medium term priorities for road transport
    - road safety
    - completion of Corridor X
- priorities for the development of the Trans-European transport networks
    - raising the standard of the road Hungary border - Belgrade - Nis - Bulgarian border / FYROM border
    - construction of the Belgrade ring road between Batajnica and Bubanj Potok.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

Investment in this short section of the bypass is complemented by investments in adjoining lots of Section B. Section B is itself complemented by Section A, and the whole bypass forms a link in the wider Corridor X.

Financing of the total 47km bypass is as follows:

- Government of Serbia:	EUR	119.36m
- EBRD:	EUR	55.00m
- EAR:	EUR	6.82m
- EIB:	EUR	180.00m
Total:	**EUR**	**361.18m**

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The project concerns a single transport mode.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The question is not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Regional cooperation is addressed indirectly in that the bypass forms an important link in Corridor X, part of the TEN-T network between neighbouring countries.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

Implementation modalities can include technical assistance (TA), twinning and direct awards.

Both TA and twinning contracts are awarded on the basis of competition. TA contracts are typically undertaken by consultants and are well-suited to institution creation and flexibility. Twinning contracts

are often set up between pairs of public bodies and are particularly suited to institution strengthening. However, the intervention may be more invasive.

The mode of implementation of this project (i.e. supervision of works) is a proven form of TA that encourages efficiency. TA may not result in the same level of transfer of knowledge as twinning but this was not an objective of the project. While PE Roads of Serbia may have staff with sufficient expertise to carry out the supervision of works, it does not have sufficient capacity in terms of numbers of staff, and indeed it is perhaps preferable that this task be carried out by an independent organisation.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

There were clear and inextricable links to other (parallel) contracts in the construction of the total length of the bypass. The project preparation stages (feasibility studies) had already ensured that other bypass alignments would not deliver better results.

Was donor assistance aligned and complementary with other donor assistance?

This contract was aligned and complementary to the TA contract supporting the PIU of PE Roads of Serbia.

The objective of the supervision contract was to achieve the successful construction of a specific element of infrastructure, whereas the objective of the TA contract was to provide assistance and transfer of knowledge in a more general sense. The supervision contract was conducted largely in a location remote from the offices of PE Roads of Serbia, whereas the TA contract was executed predominantly in those offices.

Thus, the two contracts can be seen as aligned and complementary.

In a wider sense, the combination of financing from various donor and financing agencies (GoS, EBRD, EAR, EIB, EU) indicates a high degree of complementarity in a complex inter-relationship of alignment.

To what extent did the benefits justify the costs?

Traditional cost-benefit analysis (CBA) cannot be applied to the provision of such a supervision contract. The benefits are an assurance that the requirements of the Contract Agreement and that various schedules are met by the Contractor. As the cost of the supervision services falls within the range of typical costs for such services, it can be stated that the benefits justified the costs.

Traditional CBA could be applied to the specific section of the bypass or, more appropriately, to a longer and more cohesive section or to the bypass as a whole. The most recent feasibility study was carried out in 2004 with an update in 2006. The update showed that under “realistic” economic assumptions, all construction scenarios (combinations of sections and carriageway options) that included a single carriageway section B5 were shown to be economically viable. Under “pessimistic” assumptions, the same construction scenarios could be viable if the year of opening was delayed from that originally envisaged, ranging from 2011 for the scenario that best fits the existing combination of sections and carriageway options to 2020 for other construction scenarios. Actual economic conditions in the intervening period were more in line with the pessimistic assumptions than the realistic assumptions.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The financial assistance was effective in that the supervision ensured that the requirements of the Contract Agreement and the various schedules were met by the Contractor. The project was completed in advance of the programmed date.

Was the balance of responsibilities amongst stakeholders correct and adequate?

The EGIS Final Projects Report identifies the stakeholders as:

- the employer (PE Roads of Serbia)

- the funding agencies (EIB for works contracts; EUD for supervision contract)
- the bridge contractor
- the road contractor
- and the engineer (PE Roads of Serbia; EGIS International).

The balance of responsibilities between these various bodies was in accordance with proven practice and judged to be correct and adequate.

Were crosscutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Cross-cutting issues are not directly relevant to the supervision contract, but are relevant to the wider project.

According to EU Directives, the bypass was subject to a full environmental impact assessment (EIA). This was completed by international consultants in 2005. No nature conservation area protected under national or international legislation was identified. The main environmental impacts concerned loss of agricultural land, soft foundation soils and erosion or instability of cut faces. They were mitigated by compensation payments to farmers and appropriate construction techniques. Visual impacts and community severance were mostly avoided as the route does not pass through major residential or commercial areas.

Although there were a few spontaneous settlements along the route of the bypass, none of these impacted on section B5.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The immediate result was expected to be that the time schedule for construction was adhered to and that the work was carried out according to the technical specifications. Section B5 of the bypass was originally expected to be open to traffic in autumn 2012 but actually opened early, in May 2012.

To what extent did the assistance impact on the overall strategic goals of the sector?

The strategic goals of the project were stated in the logical framework matrix to be a reduction in transit time on Corridor X and a reduction in the number of accidents. A sample survey was supposed to have been carried out before and after opening but this was not done.

All transit traffic is now directed around the bypass. Traffic volumes on section B4 were forecast to be between 16,000 and 40,000 vehicles per day in 2011. This is a rather broad range to be meaningful, and 40,000 vehicles per day could not in any case be handled by a single 2-lane carriageway. Actual traffic on the section could not be obtained.

The TA would not in itself contribute to the strategic goals of the sector, but without it the project would not have been realised.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

During the years of sanctions and conflict, little maintenance of the road network was carried out. Consequently, the condition of the network deteriorated leading to increased costs and reduced safety. Recovery is now in progress with further development of the network also taking place. Section B of the Belgrade bypass will contribute to reducing this backlog of work. However, the technical assistance itself would have contributed little directly, except that without it the project would not have been realised.

Were there additional negative or positive impacts?

There were no additional impacts related specifically to the construction supervision.

Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

No elements that could hamper the impact/sustainability of the assistance were identified.

Were the indicators suitable, appropriate and SMART?

The indicators were set out in the logical framework matrix.

The indicators for the overall objective were:

- reduction in transit time on Corridor X

- reduction in the number of accidents.

The indicators for the project purpose were:

- construction done on time in line with technical specifications.

The indicators for the results were:

- adherence to the time schedule with the work carried out according to the technical specifications.

The indicators for the project purpose and results may be considered suitable, appropriate and SMART.

The indicators for the overall objective may be considered suitable and appropriate. However, in order to be SMART they needed to be more precisely defined. While they were relevant, they require that a sample survey be conducted before and after opening. However, it appears that this was not carried out. The indicators were not specific, no targets were set (reduction in transit time by how much between where and where?; how many accidents saved, where?) and they were only vaguely time-bound ("before" and "after"). Since no targets were specified, it cannot be said that they were attainable.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

All documentation includes reference to EU funding and a video was prepared to promote project visibility. The video was prepared in cooperation with EGIS and the EUD. The intended audience of the video is a wide public audience and it will be published on the website of PE Roads of Serbia. In addition, more than 10 short video clips have been produced and aired on national television.

To what extent has IPA impacted on transport safety and accessibility?

The supervision would not in itself impact on transport safety and accessibility.

The wider project will contribute significantly to transport safety and accessibility by providing new high quality infrastructure and contributing to the removal of transit traffic from the city centre where it interferes with city traffic.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

Sustainability is not relevant to the supervision contract.

Sustainability of the investment will depend on an appropriate regime of routine and periodic maintenance being defined and implemented. Such maintenance is essential to ensure that the infrastructure continues to provide a facility of an optimum standard and that lack of timely maintenance does not result in irreversible degradation of the facility.

Roads of Serbia already provides an effective administrative and institutional framework for the maintenance (and hence physical sustainability) of the whole network of Category I and II roads in Serbia.

However, there would appear to be a certain inefficiency in the current institutional framework, in that Corridors of Serbia is now responsible for the construction of new sections of Corridor X (which includes the Belgrade bypass).

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

Sustainability is not relevant to the supervision contract.

No additional financial requirements are expected as a result of the construction of this section of the bypass.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Sustainability is not relevant to the supervision contract.

PE Roads of Serbia benefits from a relatively low turnover of staff. Staff who interacted with the Consultant and benefitted from transfer of knowledge have largely remained within the organisation and are thus available to manage future assistance.

Nevertheless, as the sector matures, opportunities may develop elsewhere (e.g. in the private sector) which may be more attractive. Steps should be taken to ensure that PE Roads of Serbia is continues to be an attractive employer in such circumstances.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Sustainability is not relevant to the supervision contract.

5.1.2 IPA 2008 PIU to Serbian Roads

The original project fiche envisaged a contract period of 3 years to provide technical assistance to support the implementation of road and rail infrastructure projects. The overall EU contribution was to be EUR 4m.

The contract to provide Technical Assistance (TA) to the Project Implementation Unit (PIU) of PE Roads of Serbia was awarded to Hill International. It had a value of EUR 1.3m and ran for a period of 2 years. The contract represented the IVth assistance to the PIU as a continuation of previous assistance carried out by Hill and prior to that by BCEOM. The previous contracts were financed by EAR.

The TA addressed various issues related to the launching of tenders, bid evaluations, design reviews and technical advice on the following tasks:

- finalisation of the construction of the E75 motorway section Belgrade - Novi Sad, including construction of the new Beska Bridge / reconstruction of the existing Beska Bridge (EIB, EBRD, state budget).

- completion of the Belgrade transit route E70/E75 including rehabilitation of the urban transit motorway, Gazela Bridge and R251 ring road[2] (EIB, EBRD).

- completion of the construction of the Belgrade bypass sections A1 and A2 (Batajnica to Dobanovci) (EIB, EBRD).

[2] The R251 ring road runs parallel to a planned section of the Belgrade bypass. However, as the Belgrade bypass had not been completed, rehabilitation of the ring road was necessary to cater for traffic temporarily diverted from the Gazela Bridge during rehabilitation works on the bridge.

- completion of the construction of the Belgrade bypass section B5 and B6 (Orlavaca to Bubanj Potok) (EIB, EBRD).

- completion of the rehabilitation of 100 road bridges (EIB co-finance).

- completion of other projects financed by EIB/EBRD that were in the Defects Notification Period.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport "Roadmap to a single European transport area - towards a competitive and resource-efficient transport system" (2011). The project addressed several key links in the Serbian road transport network. It is relevant and aligned to several of the 10 goals designed to guide policy actions including:

- development of the TEN-T network
- reduction of road casualties.

The EU document "Serbia 2007 Progress Report" refers to the need to strengthen the administrative capacity of the transport sector. This project will strengthen administrative capacities in the field of transport infrastructure project preparation and implementation.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The project responds to the following priorities identified in the NPI:

- short term priorities for road transport
    - institutional capacity building
- medium term priorities for road transport
    - institutional capacity building
    - completion of Corridor X
    - completion of other state roads.
- priorities for the development of the Trans-European transport networks
    - raising the standard of the road Hungary border - Belgrade - Nis - FYROM border
    - construction of the Belgrade ring road between Batajnica and Bubanj Potok
    - rehabilitation of the Gazela bridge in Belgrade.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The list of projects (as set out above) that was supported by this TA to the PIU all included financing by the EIB and the EBRD.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The project concerns a single transport mode.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The question is not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Regional cooperation is not directly relevant to this specific project. However, regional cooperation is addressed in that several of the projects for which assistance was provided form links in Corridor X, part of the TEN-T network between neighbouring countries.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

The mode of implementation (ie. technical assistance) provided hands on experience and daily contact with international specialists. This constant contact between the Consultant and the PIU was regarded as a highly efficient way of transferring skills and knowledge.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

There were clear and inextricable links to other contracts in that the TA provided support to the preparation, implementation and management of other projects.

Was donor assistance aligned and complementary with other donor assistance?

This contract was aligned and complementary to the supervision of the Belgrade Bypass section B5.

The objective of the supervision contract was to achieve the successful construction of a specific element of infrastructure, whereas the objective of the TA contract was to provide assistance and transfer of knowledge in a more general sense. The supervision contract was conducted largely in a location remote from the offices of PE Roads of Serbia, whereas the TA contract was executed predominantly in those offices.

Thus, the two contracts can be seen as aligned and complementary.

In a wider sense, the contract inter-linked with contracts financed by other agencies (GoS, EBRD, EAR, EIB, EU) and thus indicates a high degree of complementarity in a complex inter-relationship of alignment.

To what extent did the benefits justify the costs?

Traditional cost-benefit analysis (CBA) cannot be applied to the provision of such a technical assistance contract. The benefits are a provision of services to the client. As the cost of the services falls within the range of typical costs for such services, then it can be stated that the benefits justified the costs.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The contract resulted in the efficient and effective preparation and implementation of road infrastructure projects in accordance with EU rules and best practice.

Was the balance of responsibilities amongst stakeholders correct and adequate?

Not applicable

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Cross-cutting issues are not applicable within the direct context of this technical assistance contract. However, where applicable the actions of the PIU ensured that all identified cross-cutting issues were addressed.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

In the original project fiche, the results to be achieved by the contract were stated in relation to staff of the Ministry of Infrastructure. The eventual beneficiary was, however, the PIU of Roads of Serbia. The expected results were stated to include:

- improved administrative capacities to ensure an efficient and effective process of strategic planning, programming, implementation, evaluation and monitoring, financial management and control of EU external aid and IFIs supported projects in accordance with EU procedures.

- road and bridge construction and rehabilitation contracts designed to EU standards.

- procurement procedures consistent with requirements and rules of the EU and IFIs.

- controls exercised through FIDIC contracts to assure the performance, quality and safety of works.

- maintenance of financial and progress control.

- training, by direct involvement of staff in procedures, to develop the operational and management capacity of the PIU.

These are somewhat different from the eventual results to be achieved that addressed various issues related to the launching of tenders, bid evaluations, design reviews and technical advice.

Since the Logical framework matrix does not appear to have been updated from the original, it is not possible to conclude that the immediate results delivered translated into the desired and expected benefits. Nevertheless, it can be stated that the contract delivered results on a daily basis that were absolutely in line with the expected specific results of the contract. Essentially, what the contract delivered was an increased capacity of the PIU to achieve its objectives. The desired and expected benefits of the technical assistance were, therefore, achieved.

To what extent did the assistance impact on the overall strategic goals of the sector?

The overall strategic goal of the contract was to contribute to an enhanced transport system in Serbia. The achievement of this goal was to have been measured in terms of reduced journey times, reduced travel costs and reduced accidents. While the increased capacity of the PIU supports this strategic goal, it is a somewhat indirect relationship.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

During the years of sanctions and conflict, little maintenance or development of the road network was carried out. Consequently, the condition of the network deteriorated leading to increased costs and reduced safety. Recovery is now in progress with further development of the network also taking place. The increased capacity of the PIU supports this process.

Were there additional negative or positive impacts?

Excellent cooperation between the Contractor and the PIU is reported, with a widely held view that greater knowledge than expected and beyond the terms of reference was transferred by the contractor.

No negative impacts were identified.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

The sustainability of the assistance could have been hampered if the PIU staff that had benefited from working alongside the TA team had subsequently left the PIU. While no specific measures were taken to mitigate this potential impact, the majority of such staff remain in the PIU.

Nevertheless, as the sector matures, opportunities may develop elsewhere (e.g. in the private sector) which may be more attractive. Steps should be taken to ensure that PE Roads of Serbia is continues to be an attractive employer in such circumstances.

Were the indicators suitable, appropriate and SMART?

It appears that the project fiche and more specifically the logical framework matrix were not updated during the inception phase of the project, even though the details were no longer correct.

According to the logical framework matrix, the indicators for the overall objective were journey times, prices (presumably referring to transport costs) and accidents. These would give a good indication of overall improvements in the transport sector but do not include targets or time frames.

The indicator for the project purpose was the number and quality of projects prepared and executed. No indication is given as to what would constitute a "report" or how "quality" would be measured.

The indicators for the results were:

- ability of Ministry staff to manage strategic programming and the project cycle (no longer relevant and imprecise in terms of measurement).

- quality and number of programme and project cycle management documents produced (though no indication is given as to what would constitute a "report" or how the "quality" would be measured).

- number and quality of standard working procedures established (as above).

- compliance with bank rules, measured by the number of cases of objections by banks (very detailed)

- quality of designs and control mechanisms (again with no indication as to how quality would be measured).

Thus, it may be concluded that overall the indicators were not suitable, appropriate or SMART.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

Apart from the routine identification of EU funding on all documentation, no additional visibility measures were implemented.

To what extent has IPA impacted on transport safety and accessibility?

This is not directly applicable to the TA contract, but the new infrastructure to which it related was built to a high standard, thus improving transport safety, and provides additional capacity, thus improving accessibility.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

Sustainability is not directly relevant to the technical assistance contract. However, there is a need for on-going training, staff development and recruitment to ensure that the Agency continues to function and develop.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

Sustainability is not relevant to the technical assistance contract.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Sustainability is not relevant to the technical assistance contract.

As indicated above, the majority of PIU staff that had benefited from working alongside the TA team remain in the PIU.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Sustainability is not relevant to the technical assistance contract.

5.2 Railways

5.2.1 IPA 2008 System of Track Conditions

The project comprises four elements:

- A. design and population of an infrastructure database of the core network, including the exact location of railway assets, mainly using aerial survey
- B. design of a railway management system (RMS) and pilot application
- C. capacity building and training in the use of the RMS
- D. needs analysis and procurement assistance for the equipment required to fully support the RMS.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport "Roadmap to a single European transport area - towards a competitive and resource-efficient transport system" (2011). Development (and subsequently maintenance) of rail networks is relevant and aligned to several of the 10 goals designed to guide policy actions including:

- shifting of long distance road freight to rail
- shifting of medium distance passenger traffic to rail.

The Council Decision of 14 June 2004 on medium-term priorities for Serbia includes the strengthening of capacity building, including project preparation for large investments and earmarking sufficient resources for the maintenance of transport infrastructures. Application of a modern rail track survey system and creation of a reference database will create the necessary pre-requisites for the efficient and cost-effective planning of maintenance and of investments for rehabilitation of parts of the railway infrastructure.

The document "European Partnership with Serbia, including Kosovo" includes a key medium term priority in the transport sector to "continue improving data-led asset management for the maintenance and rehabilitation of transport infrastructures".

The European Agreement on Main International Railway Lines (AGC) and the European Agreement on Important International Combined Transport Lines (AGTC) define the necessary international infrastructure standards and agreed performance parameters. When the planned system for line condition analysis is introduced, data on the Serbian Railway network will be constantly available and updated, which will create conditions for regular maintenance and the assurance of parameters at the required level.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The project is specifically identified in the NPI under the title "Analysis of the state of railways".

Furthermore, the links to be surveyed lie predominantly on Corridor X and on lines to neighbouring countries.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

While other projects relate predominantly to investment in the rehabilitation of infrastructure, this project should assist in their long term sustainability through maintenance, and is thus coherent and complementary.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The project concerns a single transport mode.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The question is not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

The lines to be surveyed lie predominantly on Corridor X and on routes to neighbouring countries, thus indirectly enhancing potential for regional cooperation.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

The mode of implementation (i.e. technical assistance with a significant training element) is providing hands on experience and daily contact with international specialists.

How well was the selected contract linked to other contracts and whether other contracts could deliver better results?

The RMS will be invaluable in the future in providing information leading to the timely maintenance of the infrastructure. However, this assumes that the infrastructure (or at least a significant part or it) has already been modernised and is in good condition. When so much of the infrastructure is in poor condition and requires to be modernised, the RMS is of only limited use.

Nevertheless, on completion of the project the necessary tools and skills will have been transferred to SR and will therefore be in place for the effective management of future maintenance requirements.

Was donor assistance aligned and complementary with each other?

In the longer term, the RMS will be an essential tool in providing timely information about the condition of the network. The system will provide the information required to ensure that the rehabilitated sections are maintained in good condition. However, until a significant proportion of the network has been rehabilitated, the system will be of limited use. Complementary projects that will progress the programme of rehabilitation include:

- IPA 2008 PPF3 feasibility study and EIA for the Stara Pazova - Novi Sad line
- IPA 2010 PPF4 preliminary design for the Nis - Brestovac line
- IPA 2009 Zezelj Bridge reconstruction
- IPA 2011 project documentation for the Novi Sad - Subotica - Hungarian border line
- doubling and electrification of the Belgrade - Pancevo line (Russian bi-lateral funding)
- development of the Valjevo - Loznica line (Russian bi-lateral funding)
- reconstruction of 200km of Belgrade - Bar line (Russian bi-lateral funding)
- reconstruction of 111km of Corridor X (Russian bi-lateral funding).

To what extent did the benefits justify the costs?

The project has not yet been completed but it would not be appropriate to apply traditional CBA. Nevertheless, two important issues can be raised.

1. The full benefits of the RMS will not be realised until more lines have been rehabilitated and can be maintained to a high standard through timely intervention.

2. The reform and restructuring of SR is a pre-requisite to the future efficiency and even the very existence of an operational railway system in Serbia. Until such reform has taken place, it is not clear that the costs of the project will be justified by the benefits.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

Tasks A and B are complete and the funded interventions are operational.

Was the balance of responsibilities amongst stakeholders correct and adequate?

Not applicable to this specific project.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

The project fiche address equal opportunity, environment and minority/vulnerable groups issues explicitly. However, these are only marginally or implicitly applicable in the direct execution of the project.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The immediate results of the project are:

- A. Design and population of the infrastructure database
- B. Design of the RMS
- C. RMS capacity building and training
- D. Needs assessment.

Tasks A and B are complete and provide the expected benefits in that the database and RMS are in place and are operational. Tasks C and D are ongoing.

To what extent did the assistance impact on the overall strategic goals of the sector?

The strategic goal of the project was stated in the logical framework matrix to be to contribute to the improved performance and reliability of the railway transport sector in Serbia, in pursuance of EU requirements.

It is too early to state whether or not this goal will be achieved, but successful completion of the project would contribute to improved performance and reliability.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

During the years of sanctions and conflict, little maintenance or development of the railway network was carried out. Consequently, the condition of the network deteriorated leading to increased costs and reduced safety. Recovery is now in progress and an improved maintenance management system will support this process.

Were there additional negative or positive impacts?

No additional negative or positive impacts were identified.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

No specific measures identified.

Were the indicators suitable, appropriate and SMART?

The indicators are set out in the logical framework matrix. The indicators for the overall objective are:

- journey times
- accident / incident statistics.

The proposed sources of such data are:

- railway company reports
- maintenance statistics
- report on PE Serbian Railways Business Plan Implementation.

The indicators are not specific. It is not clear to what exactly the sources refer, nor that data relating to the selected indicators would be available from such sources. Furthermore, no baseline or target values are provided and no timescale is defined.

Similar comments apply to the indicators for the project purpose:

- frequency of unforeseen maintenance works
- execution time of maintenance works
- speed and precision of recording and marking of railway infrastructure

and for the results:

- number of procedures and instructions defined
- stage of software development
- number of km of track surveyed
- number of items recorded in database
- stage of preparation of each type of required hardware
- skills of personnel
- number of training events held
- number of participants at training events.

Not all of these would be measurable or available, especially considering that no baseline or target values are provided, and no timescale is indicated.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

The project complies with EC visibility guidelines, as far as could be ascertained.

To what extent has IPA impacted on transport safety and accessibility?

Ultimately, timely maintenance will reduce the occurrence of incidents that could lead to issues of safety and will improve accessibility through higher speeds and more reliable journeys.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

A separate unit is to be established within SR to take on responsibility for maintaining and using the RMS. This will initially consist of engineers responsible for sub-structure and power, plus an IT specialist. However, as the system develops, more staff will be required. It is intended to train more staff in use of the system.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

Discussions with SR indicate that the RMS requires a modernised (or new) measurement vehicle and it is not clear that funds are available. It may be noted that it is stated in the project fiche that SR already possess good rolling stock for track and Overhead Contact Line (OCL) recording. The track recording coach is stated to be a recent purchase that is fully up to date. For the OCL recording, some minor upgrading is required. This was to be carried out in parallel by SR so that full use could immediately be made of the new system.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Not applicable.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable to this specific project.

5.2.2 IPA 2008 Supervision of Zezelj Bridge

The original Zezelj bridge across the Danube at Novi Sad was destroyed in 1999. It had two road traffic lanes and a single rail track. A temporary bridge was constructed in 2000 but it is severely restrictive to traffic. Navigation on the Danube is restricted by the low height and short distance between piers. Road and rail traffic is limited as the bridge has only a single traffic lane with a single rail track in the middle. Road traffic is thus restricted to alternating directions, both of which must be suspended each time a train passes.

The new bridge is being constructed at the same location as the destroyed bridge and will provide two road traffic lanes, two rail tracks (although only one will be operational initially) and two pedestrian/cycle lanes.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport "Roadmap to a single European transport area - towards a competitive and resource-efficient transport system" (2011). As a key link in the Serbian railway section of Corridor X, the Zezelj Bridge is relevant and aligned to several of the 10 goals designed to guide policy actions including:

- shifting long distance road freight to rail and IWT
- shifting medium distance passenger traffic to rail
- development of the multi-modal TEN-T network
- reduction of road casualties and improvement of safety of all modes.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

Reconstruction of the Zezelj bridge is specifically identified in the NPI as a short to medium term priority for the development of the Trans-European transport networks. It is consistent with the priority to reconstruct and modernise the railway line from the Hungarian border to Belgrade, Nis and on to the border with Bulgaria and FYROM. It is also consistent with the road transport priority relating to the completion of state roads.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The revised financing of the bridge is as follows:

- dismantling of old bridge and installation of new bridge: Autonomous Province of Vojvodina, City of Novi Sad EUR 19.1m
- fabrication of steel bridge structure: IPA 2009, EUR 26.2m
- project supervision: IPA 2008, EUR 1.9m.

The supervision contract is thus coherent and complementary with support provided by the Autonomous Province of Vojvodina, the City of Novi Sad and the IPA 2009 grant for the fabrication of the steel structure of the bridge.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The contract is significant in that it contributes assistance to an infrastructure project that addresses objectives across road, rail and IWT modes.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Regional cooperation is addressed indirectly to the extent that the bridge will be a link in Corridor X, part of the TEN-T network between neighbouring countries.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

The mode of implementation (ie. supervision of works) is a proven approach in accordance with the yellow FIDIC contracting model that encourages efficiency. However, significant delays suggest that optimum efficiency is not being achieved, though this is not necessarily due to any inadequacy in the supervision contract itself.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

There were clear and inextricable links to other (concurrent) contracts i.e.:

- dismantling of old bridge and installation of new bridge
- fabrication of the steel bridge structure.

No specific alternative contracts have been identified that would deliver better results, since the contract is in accordance with the yellow FIDIC contracting model.

Was donor assistance aligned and complementary with other donor assistance?

This contract was aligned and complementary to:

- dismantling of old bridge and installation of new bridge, financed by the Autonomous Province of Vojvodina and the City of Novi Sad
- fabrication of steel bridge structure, financed by a separate EU grant.

The objective of the supervision contract is to achieve the successful construction of a specific element of infrastructure and is thus directly aligned and complementary.

A further contract under IPA 2011 relates to the construction and supervision of the access roads to the Zezelj bridge. The contract is awarded and has begun but construction but cannot commence because of delays in the preparation of documents, in the issuing of the construction permit and lack of progress with the main construction works. In the meantime, the funds must be used by 2015 and there are concerns that the work will not be completed by then.

To what extent did the benefits justify the costs?

Traditional cost-benefit analysis (CBA) cannot be applied to the provision of such a supervision contract. The benefits are an assurance that the requirements of the Contract Agreement and various schedules are met by the Contractor. As the cost of the supervision services falls within the range of typical costs for such services, then it can be stated that the benefits justified the costs.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The project is not yet completed and it remains to be seen if the supervision contract is effective in ensuring that the requirements of the Contract Agreement and that various schedules are met by the Contractor.

However, after one year the project should be about 50% complete, whereas in reality it is only 15% complete by May 2013 according to SR.

Was the balance of responsibilities amongst stakeholders correct and adequate?

The project involves the Autonomous Province of Vojvodina, the City of Novi Sad, the EUD and Serbian Railways (SR). Because of the problems that have arisen and subsequent delays, SR raised the question of whether they should have had more influence in the project, for example by having a greater presence in the Steering Committee. SR is aware that they should have been more proactive in increasing their influence in the Steering Committee.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Cross-cutting issues are not directly relevant to the supervision contract. With regard to the wider project, the new bridge will directly replace previously existing infrastructure and, although it will be slightly wider than the original bridge, will have no negative environmental impacts in terms of encroachment on nature conservation areas, loss of amenity, visual impact, community severance or displacement.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The construction contract to build the new bridge was signed in January 2011 by the EU, the Autonomous Province of Vojvodina and the City of Novi Sad and Serban Railways, with construction supervision being carried out by DB International/EGIS International. The contracted period for construction supervision is 44 months, being 32 months for the period of design and construction followed by a 12 month Defects Notification Period.

Preparation of the main design began in March 2011 and the planned start of construction was November 2011. However, work did not actually start until April 2012, partly due to the delay of the Contractor in the preparation of the design and partly due to the delay of the Investor in providing the technical control and confirmation of the works announcement.

As of April 2013, construction should have been 50% complete. The actual status in April 2013 was that 17% of Lot 1 (steel structure of the bridge that is being constructed in Italy) and less than 12% of Lot 2

(civil engineering works) has been completed. Since the initial evaluation, we gather that 31% of Lot 1 is now certified. We have also been advised that disbursements on Lot 1 (fabrication of the steel structure in Italy had increased to €11 million by the end of June 2013. Whilst this is encouraging, there are still, nevertheless delays with respect to the civil engineering works, which need to be resolved quickly.

Reasons for the ongoing delays include unforeseen obstacles to construction including:

- discovery of concrete blocks around the piers
- discovery of an unexpected concrete chamber
- discovery of old, leaking and incorrectly dimensioned pipes (sewage, water and gas)
- and changed conditions.

In view of the above, the Contractor requested an extension of a total of 19 months to June 2015 plus additional payment of EUR 5.4m. However, the claims were rejected by the Engineer who proposes an extension of 3.4 months and an additional payment of EUR 0.3m.

It is unclear how this will be resolved. Both the Contractor and the Investor now appear to have the right to terminate the contract. However, this would require the conclusion of a contract with a new Contractor who would have to agree to work with materials from the previous contract, and would raise questions about the warranty for the entire structure. In the meantime, work continues at a reduced pace.

We gather that subsequent to our initial findings, this dispute is to be resolved through the procedures defined in the contract including DAB and negotiations.

To what extent did the assistance impact on the overall strategic goals of the sector?

The overall objective of the project is to restore full road and rail services across the Danube. Completion of the bridge will fully achieve this objective.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

The reconstruction of the bridge is a key element in the reconstruction of infrastructure.

Were there additional negative or positive impacts?

Not at present.

Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

No elements that could hamper the impact/sustainability of the assistance were identified.

Were the indicators suitable, appropriate and SMART?

The indicators that are relevant to the works supervision contract are set out in the logical framework matrix and identified as “output” indicators. They include:

- original foundation pier adapted to receive new foundations built to receive the bridge decking and superstructure
- steel superstructure completed and delivered to site
- bridge deck and superstructure erected
- slip roads and access ramps completed
- road and rail infrastructure completed
- bridge commissioned and open to road & rail traffic
- temporary bridge demolished and debris and removed.

As far as the supervision contract is concerned, the indicators are suitable, appropriate and SMART.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

No specific visibility initiatives were identified and SR appear to have little appreciation of visibility requirements.

To what extent has IPA impacted on transport safety and accessibility?

The supervision contract does not impact on transport safety or accessibility. However, the bridge itself will do so and this question is addressed in the analysis of the Zezelj Bridge construction project (5.2.3).

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

The contracted period for construction supervision of 44 months includes a 12 month Defects Notification Period. In the event that the contract period is extended beyond that envisaged due to delays caused by the Contractors, or extensions of time granted to the Contractors by the Employers, the extension will be up to a maximum value and duration not exceeding the original contract. It would be subject to the availability of funding and to the satisfactory performance of the Consultant in terms of progress and results.

The sustainability of the supervision is thus assured.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

This question is addressed in the analysis of the Zezelj Bridge construction project (5.2.3).

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Not applicable

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable to this specific project.

5.2.3 IPA 2009 Construction of the Zezelj Bridge

The original Zezelj bridge across the Danube at Novi Sad was destroyed in 1999. It had two road traffic lanes and a single rail track. A temporary bridge was constructed in 2000 but it is severely restrictive to traffic. Navigation on the Danube is restricted by the low height and short distance between piers. Road and rail traffic is limited as the bridge has only a single traffic lane with a single rail track in the middle. Road traffic is thus restricted to alternating directions, both of which must be suspended each time a train passes.

The new bridge is being constructed at the same location as the destroyed bridge and will provide two road traffic lanes, two rail tracks (although only one will be operational initially) and two pedestrian/cycle lanes.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport “Roadmap to a single European transport area - towards a competitive and resource-efficient transport system” (2011). As a key link in the

Serbian railway section of Corridor X, the Zezelj Bridge is relevant and aligned to several of the 10 goals designed to guide policy actions including:

- shifting long distance road freight to rail and IWT
- shifting medium distance passenger traffic to rail
- development of the multi-modal TEN-T network
- reduction of road casualties and improvement of safety of all modes.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

Reconstruction of the Zezelj bridge is specifically identified in the NPI as a short to medium term priority for the development of the Trans-European transport networks. It is consistent with the priority to reconstruct and modernise the railway line from the Hungarian border to Belgrade, Nis and on to the border with Bulgaria and FYROM. It is also consistent with the road transport priority relating to the completion of state roads.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The revised financing of the bridge is as follows:

- dismantling of old bridge and construction of new bridge: Autonomous Province of Vojvodina, City of Novi Sad EUR 19.1m
- fabrication of steel bridge structure: IPA 2009, EUR 26.2m
- project supervision: IPA 2008, EUR 1.9m.

The supervision contract is thus coherent and complementary with support provided by the Autonomous Province of Vojvodina, the City of Novi Sad and the IPA 2009 grant for the fabrication of the steel structure of the bridge.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The contract is significant in that it contributes assistance to an infrastructure project that addresses objectives across road, rail and IWT modes.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Regional cooperation is addressed to the extent that the bridge will be a link in Corridor X, part of the TEN-T network between neighbouring countries.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

The mode of implementation (ie. grant aid) is supported by a concurrent EU funded works supervision contract. This should ensure that the work is carried out in accordance with the yellow FIDIC contracting model. However, significant delays to construction (see 4.4 above) indicate significant inefficiencies.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

There were clear and inextricable links to other (concurrent) contracts i.e.:

- dismantling of old bridge and installation of new bridge
- project supervision.

No specific alternative contracts have been identified that would deliver better results, since the contract is being supervised in accordance with the yellow FIDIC contracting model.

Was donor assistance aligned and complementary with other donor assistance?

This contract was aligned and complementary to:

- dismantling of old bridge and installation of new bridge, financed by the Autonomous Province of Vojvodina and the City of Novi Sad
- project supervision, financed by a separate EU grant.

Complementary projects include the upgrading and rehabilitation of railway lines in Corridor X leading to the bridge, including:

- PPF3 feasibility study and EIA for the Stara Pazova - Novi Sad railway line (IPA 2008)
- modernisation of railways: project documentation for the railway line Novi Sad - Subotica - Hungarian border (IPA 2011)
- reconstruction of sections of Corridor X (Russia bi-lateral funding).

To what extent did the benefits justify the costs?

In terms of the costs and benefits of the overall project, reference has been made to the feasibility study prepared by CIP. It may be highlighted that, as a Design Institute very closely associated with Serbian Railways, CIP is perhaps not totally independent of and impartial to the project.

The feasibility study shows an EIRR of 8.9% and an NPV of EUR 23m at a discount rate of 6%. The calculation was based on the original investment cost of EUR 60m rather than the revised investment cost of EUR 45.3m.

However, the traffic analysis on which the analysis is based is rather weak. Taking 2008 as the base year for the traffic analysis, the study shows that rail passenger traffic has decreased constantly since 2001. Nevertheless, the forecast beyond 2008 assumes that rail passenger traffic increases, without a convincing justification as to why 2008 could be regarded as the turnaround point. The main assumption appears to be that eventually railways will have a modal share of 15%. The forecast of rail freight is perhaps more credible in that it is based on a trend that shows increasing tonnages since 2000. Total numbers of trains (passenger and freight) using the bridge are forecast to increase from 71 in 2010 to 114 in 2035.

Road traffic is difficult to forecast as it is severely restricted at present by the dimensions of the existing bridge that limit flows to alternating one-way operation and by the closure to road traffic when trains pass.

River traffic is also difficult to forecast because again demand is suppressed, reduced by the restricted clearance of the bridge.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The project is not yet completed. However, once completed it will achieve the overall objective of restoring full road and rail services across the Danube and a fully navigable channel on the river. However, significant delays to the project indicate that the financial assistance has not been effective. Furthermore, wider sector results will only be achieved if a whole range of other measures and investments is put in place, including restructuring of SR, rehabilitation of infrastructure, investment in rolling stock etc.

Was the balance of responsibilities amongst stakeholders correct and adequate?

The project involves the Autonomous Province of Vojvodina, the City of Novi Sad, the EUD and Serbian Railways (SR). Because of the problems that have arisen and subsequent delays, SR raised the question of whether they should have had more influence in the project, for example by having a greater presence in the Steering Committee.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

The new bridge will directly replace previously existing infrastructure and will thus have no negative environmental impacts in terms of encroachment on nature conservation areas, loss of amenity, visual impact, community severance or displacement.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The project is not yet completed. However, once completed it will deliver the expected benefits of restoring full road and rail services across the Danube and a fully navigable channel on the river.

To what extent did the assistance impact on the overall strategic goals of the sector?

The overall objective of the project is to restore full road and rail services across the Danube. Completion of the bridge will fully achieve this objective.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

The reconstruction of the bridge is a key element in the reconstruction of infrastructure.

Were there additional negative or positive impacts?

No additional impacts were identified.

Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

Failure to put in place a maintenance regime could hamper sustainability. However, according to SR this is foreseen (see below).

Were the indicators suitable, appropriate and SMART?

The indicators are set out in the logical framework matrix.

The indicators for the overall objective are that the bridge is completed and that traffic is flowing across and beneath: suitable and appropriate but not very SMART. The indicators relating to traffic are vague and, although measurable, no targets or time-frame are specified.

The indicators for the project purpose are:

- improved traffic flows along Corridor Xb road and rail crossing of the Danube at Novi Sad
- bottle neck on Corridor VII Danube at Novi Sad removed
- capacity of the Corridor Xb road and rail crossing over the Danube at Novi Sad increased
- reduction in the number of incidents / accidents associated with the temporary bridge over the Danube (Corridor VII) at Novi Sad.

The first three indicators are essentially the same and repeat an overall objective indicator. They are vague and include no baseline or target values. Therefore, they cannot be stated to be SMART.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

No specific visibility initiatives were identified and the SR appear to have little appreciation of visibility requirements.

To what extent has IPA impacted on transport safety and accessibility?

According to the logical framework matrix, one of the indicators is a reduction in the number of incidents and accidents associated with the temporary bridge. It can be imagined that alternating one-way traffic, the shared use by road and rail traffic and the problems caused to river traffic by the low clearance of the bridge could well lead to safety issues. However, no evidence or statistics identifying the bridge as a particular black spot were discovered.

The temporary bridge is used predominantly by truck traffic, and by other vehicles that can save time using the bridge compared with alternative routes. In particular, increased capacity across the Danube will improve accessibility between Novi Sad and Petrovaradin and remove traffic from congested central areas.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

An agreement will be drawn up between the City of Novi Sad and SR regarding maintenance of the bridge. However, the future effectiveness of the administrative and institutional framework is in doubt due to the failure to progress restructuring of SR - the company is in debt and overmanned yet lacking sufficiently trained staff in many areas.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

It is not expected that additional sums will be required, as there will be savings from the decommissioning of the temporary bridge, which is expensive to maintain. Nevertheless, there are serious doubts about the ability of SR to finance future maintenance requirements.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Not applicable

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable to this specific project.

5.3 Inland Waterways

5.3.1 IPA 2007 River Information Services (RIS)

The RIS project comprises three components including a Technical Assistance contract for €6.4 million to develop, integrate and install software and hardware for an operational River Information System to improve inland waterways transport on the Pan-European Corridor VII. This has been the focus of this evaluation. Its aim is to improve traffic safety on the waterway, improve navigation on the river and to enable authorities to manage and plan traffic operations.

A supervision contract to ensure the design and installation of the system (€2.1 million) also comprised part of this overall project as well as a supply contract for the equipment (€2.5 million). The project started in September 2009 and was completed in March 2013. The project covers the entire length of the waterway from the Hungarian border to the Romanian border. It was also extended to the Sava River.

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

The White Paper on EU Transport Policy sets out the approach for the development of the Trans-European Transport Network to 2020 and highlights the need for a shift away from the current modal focus with its emphasis on road and rail towards more sustainable and environmentally-friendly transport modes with more emphasis placed on the development of the Inland Waterways. The action programme - **NAIADES** - also sets out a programme for 2002-2013 focusing on a comprehensive approach to the development of the Inland Waterways with the emphasis on the market, fleets, employment and skills and infrastructure. The MIPD for 2007-2009 highlights the importance of developing the full potential of Serbia's inland waterways, in particular the Danube basin.

The establishment of the RIS complies fully with the EU RIS Directive (September 2005), which is a tool for EU transport policy development designed to create the infrastructure for the creation of trans-European networks.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The National Strategy of Serbia for accession to the EU emphasises the importance of inland waterway transport in Serbia as a means to develop a sustainable and environmentally friendly transport mode. The development of the RIS is clearly identified in the list of projects budgeted for.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The project is complementary to the Master Plan for Inland Waterways for Serbia (2005), the feasibility studies for the Serbian IWT network and for the IWT ports funded by the EAR. It is also linked to Danube-Serbia Socio-Economic Strategy.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

This project is clearly linked to the development of intermodal transport and the promotion of more environmentally-friendly transport modes to promote the development of Pan-European Corridor VII as a key strategic artery.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Under the project designed to harmonise the Acquis, three primary laws and seven bylaws were drafted and approved by the GoS. These include:

- Law on Maritime Navigation
- Law on Vessels Nationality and Registration
- Law on Amendments on the Law on Navigation and Ports on Inland Waters.

To what extent have issues related to the removal of physical and non-physical barriers been addressed and incorporated into policy directives and complementary transport programmes?

The establishment of the RIS will provide an extremely valuable tool for monitoring traffic along the Danube and parts of the Sava Rivers and will aid customs and police and border controls with vessel tracking and tracing.

To what extent has regional cooperation been addressed in transport policies and programmes?

The RIS project forms part of the Pan-European strategy to implement the IRIS Master Plan for the entire length of the waterway from the North Sea to the Black Sea. This project links with other Danube countries including Austria-DORIS; Hungary-DaTRAM; Croatia-CRORIS; and Romania-RoRIS). The project, therefore, is an important component in developing a regional approach to the development of

the Danube as a main transport artery recognising its importance as one of the strategic Pan-European Transport Corridors - Corridor VII.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

Although there were initial delays in the supply of equipment, the project moved ahead reasonably smoothly and was extended to the installation of three additional towers on the Sava River. The contracting of a supervisor to monitor implementation and installation is standard practice for these types of contract.

How well were the selected contract linked to other contracts and whether other contracts could deliver better results?

This project built on earlier pilot work on the river and is linked to others including the removal of UXOs and the river training, which has just been launched. They form part of a cohesive set of measures to improve navigation on the Danube as part of the medium term strategy for developing Pan-European Corridor VII.

Was donor assistance aligned and complementary with each other?

This project was aligned with previous works on the Danube River funded by the EU.

To what extent did the benefits justify the costs?

The project yielded a wide range of benefits including a Fairway Information System (FIS) with Electronic Navigation Charts (ENCs) vital for skippers. This was supplemented by Voice Based VHF; a Vessel Tracking and Tracing Service (VTTS); a shore-based AIS (Automatic Identification System); a Traffic Information System (with electronic ship reporting); and a Calamity Abatement Service. It provided for data exchange with other Danube administrations, exchange of data on traffic and FIS by GPS. This will have a large number of beneficiaries including port masters, border police, customs, lock masters, rescue services, water management agencies, skippers, freight forwarders etc. The benefits to safe navigation and traffic management are enormous and fully justify the costs.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The assistance provided under this project has had a significant effect on the navigation of the Danube (Pan-European Corridor VII) and the installation of a RIS along the full length of the Danube and part of the Sava will contribute greatly to the medium and long-term goals of promoting IWT in Serbia.

Was the balance of responsibilities amongst stakeholders correct and adequate?

All stakeholders have been heavily involved in the development and promotion of this project. Two large visibility events were held for users in April 2013 and politicians (May 2013).

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Environmental issues were taken into account when designing and installing the RIS and the potential beneficial impact on local and regional development was a key component of the project.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The project was completed in March 2013 and the system became operational. Unfortunately, at the time of the evaluation, the system had been forced to be shut down due to delays in approving the

operational budget and the failure to negotiate internet contracts on time. It is now necessary to launch tenders for the provision of internet services which should take some months to conclude.

Assuming that this problem is resolved in the near future, the RIS project will contribute significantly to efficient and safe management along the Danube. This fully complies with European efforts to improve safety on the inland waterways, which will act as a spur to the development of traffic flows on the rivers. Compatibility with the RIS systems in neighbouring countries will ensure the harmonisation of navigational management systems amongst all the countries.

To what extent did the assistance impact on the overall strategic goals of the sector?

Assuming that the RIS is operational in the near future, it will have a positive impact on the goals set down for the sector as defined in the GMPT, the MIPDs and the NPI. The prioritisation of Corridor X for road and rail transport and the concentration of funding by IFIs and bi-lateral donors on these two modes mitigates against developing the IWT in the short and medium term given the low volume of traffic on the river and the considerable costs necessary to improve navigation (removal of sunken ships) and the lack of infrastructure to promote intermodal transport. Certainly, it would be foolhardy not to maintain the RIS and to provide for on-going river training if the river does become a viable option in the future. It does after all form one of the pillars of European Transport policy in terms of developing sustainable and environmentally friendly transport systems.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

Not Applicable.

Were there additional negative or positive impacts?

The negative impact relates specifically to the delays in providing operational funding and the need to conclude tender contracts for the provision of internet services. A project costing €11 million to establish a state of the art RIS harmonised with those of the surrounding countries should not be jeopardised in this way. Not only does it have a direct impact on the RIS project itself but it will also impact on the NEWADA and Co-WANDA projects, the first designed to develop a network of waterways and the remote monitoring of aids to navigation; and the second focusing on waste management.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

As above, the failure to provide adequate finance to maintain the system and the potential damage that could be caused to structures and vessels using the waterways.

Were the indicators suitable, appropriate and SMART?

The Logical Framework Matrix is basic and the OVIs are weak. They are not time bound, there are no indicators for the number of staff trained and the activities just provide two contracts as the indicators. Assumptions are the same for the project purpose, the results and the activities. In the light of the problems that have developed recently with the lack of funding, this should be stated as a pre-condition for financing. If the Government is not willing to support the project with essential local funding, then it should not be approved. Future projects in this area should be delayed until a positive commitment is made to support these projects.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

Two major Visibility Events were organised by PLOVPUT as the project ended and widespread international interest in the project has been promoted.

To what extent has IPA impacted on transport safety and accessibility?

One of the fundamental goals of this project is to improve navigational safety on the Danube and Sava rivers and to provide unhindered accessibility for freight and tourist vessels. The installation of the FIS will have a major impact on monitoring vessel movements and on providing ENCs to skippers and other users of the river including rescue services etc.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

PLOVPUT currently has 101 staff and a budget of €1.7 million per annum. This is a 30% reduction on previous years. With these funds, they need to maintain vessels on the waterways, provide the administrative and institutional support for the programme and manage the various projects including RIS, the River Training project etc. One would need to question whether this is sufficient.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

See the comments above regarding the lack of funding for maintenance and the decision to shut the system down.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Certainly, PLOVPUT has a core of experienced and committed staff conversant with the policy decisions needed to promote greater usage of the Inland Waterways and the wider regional ramifications of such interventions.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the *acquis communautaire* and has it facilitated in developing regulatory bodies in the transport sector?

The issue here is whether PLOVPUT in its present form, with a significantly reduced budget and a significant reduction in staff, has the capacity to manage the development of IWT in Serbia and take on the enforcement of regulatory functions. Much of this will depend on the extent to which IWT is further promoted and the investments outlined in the Master Plan for the upgrading of infrastructure and ports materialise. Given the focus of investments on Corridor X (Road and Rail), the promotion of IWT would appear not to be a priority at present.

5.3.2 IPA 2009 Removal of Unexploded Ordnances (UXO) from the Danube River

This project was designed to identify unexploded ordnances (UXO) on the Danube River focusing on priority areas and to supervise their removal to ensure safe navigation along the fairway. The project comprised two contracts, one awarded to SeaTerra of Germany for €2.9 million and a supervision contract with Mull and Partner also from Germany for €0.8 million. The location of the project was at Prahovo where there had been extensive bombing by NATO in 1999. The contracts were signed on the 16th June 2011 and completed on the 12th February 2013.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

The SAA requires countries to adopt mutually coordinated measures to develop a multimodal transport infrastructure network to solve the problems associated with transport on the Pan-European Corridors VII and X; and to develop a multimodal regional transport network to serve Serbia and the South-Eastern European Region. In this context, ensuring safe navigation in line with the new Law on Inland Waterways Navigation is an essential component in meeting these requirements.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The development of IWT formed part of the priorities identified in the NPI in the section on Water Transport and implicit in this is the guarantee of safety on the waterways.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The EU is the main donor in the IWT sector in Serbia and the removal of UXOs is complementary to interventions in the preparation of documentation for river training, the development of the RIS etc.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

This project forms part of a group of projects designed to improve navigation and safety on the Danube to enhance its reputation as a safe, sustainable and environmentally friendly transport mode and a key Pan-European Transport Corridor (VII). The RIS and River Training projects funded under IPA will provide for improved navigational safety and this project complements these by focusing on the removal of UXOs near the port of Prahovo.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The goals of support to IWT form part of the GMPT.

To what extent has regional cooperation been addressed in transport policies and programmes?

This project is part of a regional and trans-national programme to develop the waterway link between the North Sea and the Black Sea. Regional co-operation and harmonisation of policies is vital if the overall goals are to be achieved. Indeed there are stretches of the waterway that are shared between Serbia and Romania, which require coordinated action.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

Two service contracts were signed, one based on the initial survey and the removal of the UXOs (€2.9 million); and the other for supervision (€0.8 million). It is normal to have a supervisory body for such a project and Mull and Partner had extensive experience on the Danube and in the area of inland waterways.

How well were the selected contract linked to other contracts and whether other contracts could deliver better results?

There has been some concern on the side of the GoS (SEIO and MoT) that the contract has not been entirely fulfilled and the area near the landing bridges for the terminals has not been surveyed to the anticipated depth of 6.0 metres as required but to only 0.5 metres. The EUD argue that this constitutes only 2% of the area surveyed and that this and is outside of the navigation channel. It also argues that the additional costs of completing the survey (€1.5 million) did not justify the costs of intervention.

Was donor assistance aligned and complementary with each other?

The EAR engaged SO.GE.L.M.A. Srl. from Italy to undertake a "Survey and Search Services for UXO removal in the Inland Waterway Transport System" at a cost of €2.3 million and Mull and Partner from Germany for the "Supervision of Survey and Search Services for UXO in the Inland Waterway System" which was extended to August 2009. This preceded the current contracts but set the framework for the selected site near the Prahovo terminal.

To what extent did the benefits justify the costs?

The overall cost of the project was €3.7, million of which €0.8 million was for supervision. Both were service contracts. An extension of €200,000 was agreed to deal with the extensive scrap metal located near the terminal. Certainly, the scale of funding seems appropriate given the extent and complexity of the survey...

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

In terms of clearing the area of UXOs, most of the area has been declared clear apart from that near the landing bridges for the terminals where it was only possible to survey to a depth of 0.5 metres due the presence of large quantities of scrap metal which affected the surveillance and sounding equipment.

Was the balance of responsibilities amongst stakeholders correct and adequate?

The main beneficiary was the Mine Action Centre acting on behalf of the GoS.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?.

EU environmental standards and the ICPDR guidelines as well as the IMAS (International Mine Action Standards) were applied for the performance of the recovery work.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The priority area chosen was that adjacent to the oil refinery and embraced the terminals. It covered an area of 251,474 square metres. The project was designed to survey to a depth of 6 metres and to locate UXOs >500 lbs. The choice of site was based on a previous survey undertaken by SO.GE.L.M.A (Italy) undertaken in 2008 to 2009 and was perceived as the most critical given its proximity to the oil refinery. The work was undertaken using field magnometers, vapour sensors, side sonar scanners etc. Whilst it had been envisaged that most of the work would be undertaken underwater, the low water level allowed the survey to be done for part of the area on dry land.

Whilst 415 abnormalities were originally identified, the number of UXOs eventually detected and removed amounted to 25 grenades from the Second World War, mostly German and one Russian. No bombs >500 lbs were detected. The survey also identified 4 shipwrecks near the Terminal none of which had been destroyed in hostile activities and had not been envisaged in the contract.

Whilst most of the fairway is now clear and safe, the area under the landing bridges near the terminal comprising 2496 square metres was only surveyed to a depth of 0.5 metres and not 6 metres due to extensive scrap metal present and abandoned wrecks, which had not been detected in the previous surveys. It was claimed that access was denied to SO.GEL.MA by the Ministry of Defence when the original survey was undertaken and it was not able to undertake a full survey prior to the start of this contract. Additional funding of €200,000 was provided to partially extend the contract but this was insufficient and some €1.5 million is needed to complete the assignment in terms of the survey and removal around the landing bridges.

There is, therefore, a difference of opinion as to whether the contract was fully complied with. The MAC and the MoT approved the completion of the contract even though 2% of the survey area had not been investigated fully. The contractor and supervisor claim that the extent of the scrap was not envisaged when the initial contract was signed.

To what extent did the assistance impact on the overall strategic goals of the sector?

The project was designed to ensure safe navigation along the Danube and in the critical area of the oil terminals. This was in line with the core objective of developing Corridor VII as a key Pan-European Transport Corridor allowing safe passage for all vessels. The failure to complete the survey under the landing bridges does raise questions of concern although the EUD would argue that the additional costs did not justify further intervention.

It should be added, however, that there are eight additional sites that need to be surveyed on the Danube for UXOs as well as the removal of 200 vessels from the Second World War nearby. The latter is still considered an unsafe area by the Danube Commission.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

This project was a part of the process of reconstruction and rehabilitation following the NATO bombing of 1999 to ensure that the Danube was free from UXOs. It did, however, also address issues dating back to World War II.

Were there additional negative or positive impacts?

The negative impact relates to the dispute as to whether the contractor complied with the contract.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

As above.

Were the indicators suitable, appropriate and SMART?

The structure of the Logical Framework Matrix in the Project Fiche leaves much to be desired and the internal logic is lacking. Firstly, there are no underlying assumptions at all in the Matrix. Secondly, the Sources of Verification on the Overall Objective do not include any reference to national reports. With regard to the specific results, it refers to navigation conditions in the Prahovo port and in other selected areas aligned with Danube Commission requirements and international standards when the project is specific to Prahovo. The OVIs also have a time factor that is far too ambitious with almost a 15 year duration envisaged. This should be much shorter. Critical locations envisage 80 to 100% clearage which is far too ambitious when there are a further eight critical sites on the river needing clearage. It envisages an additional survey to ensure the absence of UXOs when it is known that the survey was not complete.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

A visibility event was organised on the 25th September 2012 in Prahovo.

To what extent has IPA impacted on transport safety and accessibility?

The project was designed to improve the safety of navigation on the Danube around Prahovo. Unfortunately, the area selected has not been completely cleared and safety is still a problem. This affects accessibility to the terminals. In addition, there are pressing problems with UXOs on another eight sites and the more difficult job of removing the 200 vessels scuttled in the Second World War.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

Responsibility for this aspect of Inland Waterway management has been devolved to the Mine Action Centre because of its specific skills in this area.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

The choice of this area around Prahovo was one of the key outputs from the SO.GE.L.M.A. study and was carried out with the approval of the Mine Action Centre. Given the problems, it is estimated that an amount of €1.5 million is needed to complete the survey and remove the wrecks as well. Given that other sites need surveying along the Danube and 200 vessels need to be physically removed near Djerdap I, substantial additional funding would be needed to guarantee safety along this stretch of the river.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

PLOVPUT has substantial policy making capacity but budget constraints have limited its ability to influence key issues.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

As above.

5.4 Aviation

5.4.1 IPA 2007 ECAA (Civil Aviation)

This project was launched in March 2009 with the signing of a contract with LFV/Swedavia of Sweden with a value of €1,697,000. Its overall objective was to support the Serbian Aviation authorities in meeting the demands of the European Common Aviation Area (ECAA) through the provision of technical assistance covering safety, security, ATM, airports and the economic situation and regulation; the supply of essential equipment for security; and training based on a Training Needs Assessment (TNA). The project was completed in June 2011.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

In June 2006 the EU and the countries of South East Europe signed an agreement on the establishment of a European Common Aviation Area (ECAA) by 2010. The ECAA amounts to a full extension of the EU internal air transport market to the Western Balkans and entails the complete liberalisation of cross-border traffic amongst the signatories, the adoption of the aviation acquis and the comprehensive restructuring of the sector at the national level. This is designed to trigger rapid traffic growth, encourage foreign investment in the sector and act as an important catalyst to broader regional integration. To achieve these benefits, Serbia and the countries of the Western Balkans needed to implement a very ambitious reform agenda in a relatively short time-frame. The European Partnership document emphasises the importance of continuation of the alignment the aviation legislation with EU *Acquis*.

Since one of the main objectives in the area of transport is full harmonisation with EU requirements, the implementation of this project was designed to accelerate the process of integration of the Republic of Serbia into the European Union in the area of civil aviation by creating a single aviation market, achieving high safety and security standards, improving regional cooperation and creating better investment opportunities.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

This project is in full compliance with the National Strategy of Serbia for the Accession to the European Union.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

Under the CARDS programme, Serbia benefitted from support to the reform and modernisation of the aviation sector concentrating on air transport safety and air traffic management (ASATC project), which was completed in mid-2007.

Support was also provided under the project, *Institutional Capacity Building Project in the Transport Sector (2007)* and the *First Alignment with the Transport Acquis,* which focused on the harmonisation of the Civil Aviation Law. The new Serbian Aviation Law was published in October 2010.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

This project was in line with the objective of promoting all transport modes and developing intermodal links to increase competitiveness and sustainability.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The signing of the ECAA Agreement in 2006 by Serbia established a strict time-frame for compliance as a part of the movement towards a Single European Sky for the South-Eastern Europe Region with a transitional phase to be completed by 2010.

To what extent has regional cooperation been addressed in transport policies and programmes?

This project is very important to the process of integrating Serbia into the ECAA and further deepening its links with the neighbouring states in South Eastern Europe.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

This project comprised two contracts, one for the provision of TA and the other for the supply of security equipment specified. This was in contrast to the twinning arrangement for the project focusing on the Harmonisation of the Acquis Phase II. Presumably, the choice of TA rather than twinning was to capitalise on the extensive experience of established operators in the aviation sector since the consortium comprised Lufthansa etc.

How well were the selected contract linked to other contracts and whether other contracts could deliver better results?

This is linked to the statement above and the issue is whether twinning would have been a more appropriate modality.

Was donor assistance aligned and complementary with each other?

The project was linked to the IPA 2008 project, Harmonisation with the Transport Communautaire-Phase II, which was involved in the drafting of aviation bylaws.

To what extent did the benefits justify the costs?

A considerable amount of work was completed in this project especially with respect to training, the supervision of the procurement and installation of the equipment and the assistance given with respect to the requirements for compliance with the ECAA. More importantly, the transposition of essential laws and bylaws was fundamental to meeting the criteria for completion of the transitional phase.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

Certainly, the installation of security equipment at the airports in Belgrade and NIS have assisted in improving security and speeding up the transit of passengers through the airport whilst adhering to international security standards. Assistance in drafting legislation and training has had a positive effect on the aviation sector.

Was the balance of responsibilities amongst stakeholders correct and adequate?

All relevant stakeholders were involved including the MoT, CAD, ANS, JAT, SMATSA, airport managers etc. The establishment of sub-groups to act as focal points for initiatives was also useful.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

The ECAA agreement covers current and future EU legislation with respect to emissions, noise and other measures that will reduce the environmental impact of aviation. Human Resource policies pay due respect to gender issues. The coverage of the project to include Nis will have a significant regional impact.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

Assessing impact based on the Draft Final Report has been difficult due to the poor quality of the report in terms of its structure and poor English. Nevertheless, interviews with the CAD have provided an insight into performance and impact.

The project had a number of key objectives:

- Fulfilment of the ECAA requirements in accordance with the pace provided for in the relevant Protocol of the agreement. This was carried out and assisted in the drafting of relevant legislation and identifying the compliance of national legislation with the requirements of ECAA.
- Support the drafting and implementation of a Safety Management Programme including aircraft and operator inspection procedures. A State Safety Programme (SSP) was prepared and delivered in March 2011.
- Support the drafting and implementation of the Air Traffic Management Manual for the supervision of the Flight Data Processing System (FDPS), in coordination with ISIS project activities. This was completed.
- Preparation of Airport Users Committee Manual and rules for Serbian airports. Completed and covered crucial aspects pertaining to environmental impact, noise abatement, obligations of the operator etc.
- Preparation of tender documents and technically support the supply of equipment including equipment identification, tender document preparation and supervision of delivery. Completed and equipment procured and installed.

The project had 3 Components:

I: TA in all specific areas (Safety, Security, ATM, Airports and Economic Situation and Regulation);

II: Supply of Equipment:

As far as this element is concerned, the equipment specified in the contract was delivered on time and installed and the contractor assisted in the preparation of the tenders, supervision and installation. This was carried out at the airports in Belgrade and Nis and substantially improved security. This was considered to be the best component of the project. Some problems were encountered due to the non-availability of specific equipment in the EU but these issues were resolved.

III: Training

A Training Needs Assessment (TNA) was undertaken and a range of courses and study tours undertaken. Training was provided in the following areas and the number of participants in each area is shown.

- Aviation Safety 120 trainees
- Aviation Security 200+ trainees
- Airports 120+ trainees
- Air Traffic Management 84 trainees
- Regulations 47 trainees

- General 29 trainees

In addition, study tours were organised to Slovenia (11 participants), Poland and Graz. The selection of Slovenia had two positive effects. Firstly, the participants could use their own Serbian language and secondly, this was a relatively new Member State of the EU and the problems encountered were not too dissimilar to those that will face Serbia. For the study tour to Poland, key policy makers including the State Secretary from the MoT and the DG of Belgrade airport participated.

To what extent did the assistance impact on the overall strategic goals of the sector?

Whilst the overall objective was to expedite the signing of the ECAA as agreed in 2006, problems still arise despite the Serbian government ratifying the agreement in 2009. ECAA is still not ratified since two countries (Belgium and Greece) have still not signed the agreement.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

Not applicable.

Were there additional negative or positive impacts?

The signature of the ECAA Agreement in 2006 by Serbia committed the country to the rapid implementation of the EC aviation acquis for the purpose of ensuring high and uniformly applied safety and security standards, consumer right rules, competition rules and rules on state aids. The Agreement also extended the Single European Sky to South Eastern Europe and thereby strengthened economic and cultural links with the EU. There have therefore been numerous positive impacts due to Serbia's ratification of this Agreement in 2010.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

Although Serbia ratified the ECAA in conjunction with all non-EU Members in September 2009, ECAA has not been fully ratified due the absence of two signatories (Greece and Belgium).

Were the indicators suitable, appropriate and SMART?

The log frame matrix was extremely simplistic. The indicators were vague and non-specific and the results indicated no time-frame for implementation and they were not quantified. In terms of training, for example, no figures are given in the Project Fiche for the numbers to be trained and to what level.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

Events have been organised to highlight the achievements of the project. The CAD web-site also highlights key developments in all critical areas, especially legislation.

To what extent has IPA impacted on transport safety and accessibility?

The project has made significant progress in improving air safety and in increasing accessibility to a much larger population. The drafting of the State Safety Programme (SSP) has been a key element in this.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

CAD now has a core of trained lawyers capable of adapting and drafting new laws and bylaws pertaining to the aviation sector.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

Support to the CAD both nationally and internationally has provided the financial resources for the CAD to develop institutionally and provide the support to an increasingly dynamic aviation sector.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Capacity building has been a fundamental part of the programme and the training courses have been designed to augment skills in the area of aviation safety, aviation security, airports, air traffic management and the capacity to draft legislation. A core of aviation lawyers is now in place at CAD.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

The CAD is responsible for ensuring that the aviation sector in Serbia fully complies with international regulations and the aviation acquis.

5.5 Intermodal

5.5.1 IPA 2008 Facilitating of Intermodal transport in Serbia

The overall objective of this project is to increase economic competitiveness in Serbia and reduce environmental damage due to the impact of the transport sector. This is to be achieved by establishing the institutional framework for the development of intermodal transport and logistics centres in Serbia. The project started in September 2010 following the signature of a contract with EGIS International of France and the Final report was submitted in February 2012. The contract value was €1,998,000 and the project duration 18 months. The project consisted of 3 major tasks:

- **Task A**: Analysis and Revision of the Results of the General Master Plan for Transport. This included a traffic flow analysis, a market analysis and recommendations on the legal framework. It also evaluated a range of locations and selected the optimum site and the technical requirements for constructing the logistics centre.
- **Task B**: Definition and Promotion of the Project. This focused on the identification of the stakeholders, the provision of training activities, workshops and study tours.
- **Task C**: Feasibility Study of the Selected Project. This included the development of a business plan, the preliminary design of the logistic area and the logistic site. It also included an EIA and the preparation of tender dossiers.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

The White Paper on EU Transport Policy highlights the critical nature of the growing imbalance amongst transport modes in the EU and its detrimental effects on the environment and congestion along the main transport arteries and in towns and cities. It, therefore, identifies the promotion of intermodal transport and increasing competition amongst transport modes as key goals. Prior to the launching of this project, the 2007 Progress Report in the Chapter on Transport Policy criticised the lack of progress in the development of combined transport and inter-modality and recommended that this be a key priority for intervention. The SAA also emphasised the promotion of rail and combined transport to develop a sustainable and environmentally friendly transport system in Serbia with the focus on the construction of terminals and logistics centres. This project concept was, therefore, very much in line with priorities set down for compliance with EU transport policy.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The NPI emphasises that intermodal transport needs to be promoted and highlights the fact that this is in its infancy and needs institutional strengthening. This is also emphasised in the Strategy of Railway, Road, Inland Waterway, Air and Intermodal Transport Development, 2008-2015.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The project was linked to a number of other studies including:

- IPA 2008 Harmonisation with the Transport Communautaire - Phase II. In the extension to this project, two bylaws were developed focusing on intermodal transport.
- IMOD-X Project - Intermodal Solutions for Competitive Transport In Serbia, Norway 2004. This raised the awareness of the need for intermodal transport in Serbia, examined capacity building requirements and proposed specific locations for the terminals.
- Technical Study and Tender Documents for the Belgrade Railway Node (CARDS 2005). This started in 2007 with the objective of promoting sustainable development along the Pan-European Railway and the Combined Transport on Corridor X. It also focused on this in the city of Belgrade through the rehabilitation and upgrading of the Belgrade Railway Node and the design of a freight terminal.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The project was very much geared to the promotion of intermodal transport and the linking of rail and road transport systems. It also included an element examining the compliance of the legal and regulatory framework with the needs of intermodal transport and with the transport acquis.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Draft bylaws were prepared for the promotion of intermodal development as part of the IPA funded project for the harmonisation of the acquis.

To what extent have issues related to the removal of physical and non-physical barriers been addressed and incorporated into policy directives and complementary transport programmes?

The issue of the harmonisation of customs regimes has been addressed to a certain degree in the study in Task 3: Legal Framework with the aim of analysing blockages during customs clearance of goods and the requirements for customs services in the intermodal terminal. The study assesses potential issues relating to the rail and road sectors and detailed discussions were held with the customs authorities in Serbia. If the terminal is to become effective and economically viable further discussions need to be held with the customs authorities in neighbouring countries which will allow direct transit through the terminal in Serbia without restrictive customs procedures; and the simplification of procedures with the development of a 'Single Window' system and integrated risk management, pre-clearance facilities etc. With regard to other non-physical barriers, the implementation of the Law on Railways and the restructuring measures envisaged will allow contracts to be made with private operators. The removal of these non-physical barriers will be vital to the success of this project as will the upgrading of the railway infrastructure.

To what extent has regional cooperation been addressed in transport policies and programmes?

The project has a strong regional component as well as a national focus. The estimated possible flows through the terminal include one block train per day between Rijeka and the terminal; one train per day from Bar and continental services linking with Montenegro, Romania, Italy, Germany, Russia and the Adriatic Ports. This would have a significant impact on promoting and developing regional cooperation and developing an efficient distribution network. One of the keys to the success of the project will be the

harmonisation of customs procedures amongst the countries involved and future linkages to other logistics centres in Serbia and in the region.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

The project was undertaken with a service contract and managed directly by the EUD in Serbia. The project was completed on time and the Final Report delivered at the end of the 18-month period.

How well were the selected contract linked to other contracts and whether other contracts could deliver better results?

This project produced the results envisaged. There was a linkage with the project to harmonise the acquis since this produced two bylaws for intermodal transport.

Was donor assistance aligned and complementary with each other?

The project identified above and financed by Norway provided a platform for the promotion of intermodal transport in Serbia and a springboard for this study. It was also complementary to the work undertaken in the context of the Harmonisation of the Acquis Phase II where draft intermodal bylaws were developed.

To what extent did the benefits justify the costs?

Given the range of activities undertaken including the development of a feasibility study, a business model, preliminary designs and the preparation of tender documents, this would appear to justify the costs. If one adds in the training, study tours and examination of the legal framework, then this appears to be a reasonable cost. In the light of the Progress Report on Transport Policy for 2007 and the prioritisation given to intermodal and combined transport, this study was an essential component in meeting the criteria set down for the adoption of the transport acquis.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The budget provided to date was purely for a study to assess the technical and economic feasibility of developing a key terminal near Belgrade. The effectiveness of the project will only be possible to measure once financing is provided and the project is finished and the terminal and transport connections in place. The estimated cost is €19 million with 85% anticipated to be provided by IPA and 15% by the GoS. In addition €4 million has been set aside for land expropriation.

Was the balance of responsibilities amongst stakeholders correct and adequate?

One of the keys to the success of promoting intermodal transport is developing stakeholder confidence through a thorough understanding of the benefits of intermodal transport and exposure to successful projects in the region and in Europe. Task B was specifically focused on identifying key stakeholders, providing a wide range of Workshops on critical themes and in delivering a range of study tours to the BILK Kombiterminal in Budapest; The Transport and Logistics Fair in Munich; The Delta 3 Dourges in France; and to 4 terminals in Germany. Representatives from Government institutions and importantly from the private sector were involved in all these study tours. Consultations with 30 of the largest companies in Serbia was also undertaken to assess the potential of developing the terminal and the concept of intermodal transport and a positive feedback given. A number have also expressed an interest in participating financially at some future stage in the operation of the terminal. Freight forwarders, logistics/transport companies, road haulage companies, shipping lines etc were all consulted.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Environmental issues form a part of the cross-cutting themes and the promotion of intermodal transport and the development of a dedicated terminal with rail links to key markets will have a positive impact on the environment by reducing the volume of rail traffic on the roads and alleviate congestion in the towns and cities en route. Minorities will benefit from reduced volumes of traffic on the roads as well as reduced environmental discharges and the improvement in safety and accessibility.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The project has been reviewed by the State Revision Committee and approved in principal. It had been planned to include the funding in IPA 2013. However, two issues have delayed this.

Firstly, the land has not yet been expropriated although this does not appear to be a problem since little of it is residential.

Secondly and more importantly, the spatial plan for the area has still not yet been approved by the Ministry of Construction and Urban Planning and a Public Hearing is needed. Without this, there can be no formal commitment to undertake the project.

To what extent did the assistance impact on the overall strategic goals of the sector?

It is not possible to assess the impact of the study since the project has not moved towards implementation at this moment in time. However, it is envisaged that it will have a number of positive impacts including the improvement in environmental quality by transferring much of the transport on to rail connections to this and other terminals. It will also reduce congestion on the main arteries and in towns and cities and provide for transhipment to other countries in the region and overseas. It will also actively involve a range of stakeholders.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

The development of the terminal will improve transport efficiency thereby reducing direct costs to producers and consumers, especially in outer regions of the country. Linkage to other countries will be improved.

Were there additional negative or positive impacts?

Once again, this is difficult to answer since the project has not yet materialised.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

Critical issues which will affect the viability of the project once it starts include the following:

- Poor quality of the rail infrastructure, which needs to be addressed urgently. Unless delays can be reduced, then it will be difficult to ensure reliability and stakeholder confidence.
- Weak operational procedures. Whilst infrastructure is a problem, delays can also be very much attributed to operational and management aspects and these need to be addressed as a matter of urgency. Customs procedures at the terminal need to be established to provide a Single Window etc and the harmonisation with facilities at the ports and neighbouring countries needs to be assured.
- Legislation needs to be in place to provide confidence to stakeholders.

Were the indicators suitable, appropriate and SMART?

The Log Frame Matrix leaves much to be desired. The OVI for the overall objective is somewhat vague and non-specific and that for the project purpose narrow and focused on the numbers recruited to a coordination body. Some of those for the results appear to have little relevance and they are not time-bound. Measurable results appear to be lacking.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

Considerable efforts have been made to involve all stakeholders to ensure that the project was well promoted and the potential benefits highlighted.

A Press Conference was held on the 1st June 2011 at the Hyatt Hotel in Belgrade, which outlined the work undertaken and the rationale behind the selection of Batajnica as the chosen terminal. A wide range of stakeholders participated.

To what extent has IPA impacted on transport safety and accessibility?

Shifting large volumes of current road traffic on to rail links to Belgrade will have a major impact on improving road safety on the main transport arteries and in the towns and cities in Serbia.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

Numerous facilities overseas have been examined and a subsidiary company, Serbiajkombi, set up to manage the project. Little, however, appears to have been done to move this project forward from the study phase.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

It is envisaged that the initial investment will come as a grant from the IPA budget for 85% of the set up costs with 15% from the GoS budget. Land expropriation charges amounting to some €4 million will come from City of Belgrade which has already set aside this amount. This will be handled through the City Land Development Company.

The viability of the project will depend very much on market reactions to the efficiency of the facility and the perceived reduction in distribution costs. In terms of overall viability, however, the terminal should not be perceived in isolation and external benefits need to be taken into account such as environmental costs. Also the proposal to develop 80 hectares nearby for shops, warehouses etc will have a catalytic effect on the economy of the area, job creation etc.

The feasibility study projects a 26% return on equity with 12 trains per week operational when viewed from a financial perspective. It has an EIRR of 13.2% and a NPV of approximately €17 million when evaluated in economic terms. With 7 trains per week, however, the project is not viable in economic terms.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Whilst the MoT has a Department for Railways and Intermodal Transport, the latter has at present only one member of staff.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable.

5.6 Horizontal

5.6.1 IPA 2008 Harmonisation with the Transport Communautaire-Phase II

This project commenced in November 2010 and was concluded in February 2013. It focused on the harmonisation of Serbian transport legislation with the EU Transport acquis and was managed through a twinning agreement with the administrations in France and Lithuania.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

One of the critical requirements for accession to the European Union is the alignment of all national laws, rules and procedures to the body of EU legislation, the *Acquis Communautaire,* by all prospective Member States. Serbia, therefore, is required to harmonise its legislation for the transport sector with the Transport *Acquis* and to ensure that the laws and regulations are incorporated into the national legal system. A general *Action Plan for Harmonization of the Legislation of the Republic of Serbia with the European Union Regulations* was adopted in 2003 and this was updated quarterly until 2008 when it was superseded by the NPI. As part of the assistance to the transport sector, a first Twinning Project was launched under CARDS - *First Alignment with the Transport Acquis* - and was signed between the EAR and the administrations in Austria and Germany in 2005. This was completed in March 2008, assisted in the preparation of new draft laws and developed a Legal Action Plan (LAP) which set out a time frame for alignment, which was formally adopted in 2007.

The IPA 2008 programme is designed to build on the work undertaken previously in the CARDS project and its mandate is clearly in line with and relevant to the accession process and compliance with the Transport *acquis*. Given that Serbia is now formally a Candidate country, then the issue of compliance with the *Acquis Communautaire* is of paramount concern. Furthermore, following the signing of the *Transport Community Treaty* in 2009, the emphasis on harmonising transport policy and legislation in the Western Balkans region is seen as a cornerstone of developing an integrated transport regime within the region. The harmonisation of legislation amongst neighbouring countries is an essential component in this.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The National Programme for Integration with the European Union (NPI) published in October 2008 clearly sets out the requirements in the legal framework for the transport sector to ensure compliance with the Transport *acquis.* This is one of the fundamental cornerstones of the process of accession. It also identifies the institutional structures required to oversee and enforce specifically the implementation of the legislation. The Twinning Project was instrumental in completing the Draft Laws on the Carriage of Passengers in Road Traffic and on Carriage of Goods in Road Traffic, which was identified as a specific short-term priority in the NPI. The Law on Working Time of Professional Drivers and Tachographs was also defined as a critical priority. Nine bylaws were also drafted for Road Safety and five for the carriage of Dangerous Goods.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

No other donors were involved in the area of legal harmonisation.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

In the Project Fiche, it was specifically indicated that one of the mandatory results would be the drafting of at least one primary law and a set of secondary legislation drafted for each transport mode (aviation,

inland waterways, rail and road). The project considerably increased the outputs with the following drafted:

- 2 Laws and 17 bylaws for the Road Sector
- 1 Law for Road Safety relating to the working time directive (tachographs)
- 2 Laws for the Railway Sector
- 3 Laws and 7 bylaws for Inland Waterways
- 2 Laws for the Aviation sector.

In addition, two bylaws were drafted for intermodal transport under a contract extension and five bylaws for the transportation of dangerous goods. The project, therefore, embraced all transport modes and assistance was extended to focus on intermodal transport and the carriage of dangerous goods.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

The Legal Action Plan (LAP) sets out the time-scale for compliance with the Transport acquis and the twinning project's mandate was to update the LAP developed in the first Twinning Project developed under the CARDS programme. Although this component was delayed due to exigencies of drafting 6 Primary Laws urgently, the updating of the LAP was completed in month 12 of the project and established clear guidelines for compliance with the Transport *acquis*.

To what extent have issues related to the removal of physical and non-physical barriers been addressed and incorporated into policy directives and complementary transport programmes?

Not included in this programme.

To what extent has regional cooperation been addressed in transport policies and programmes?

This project will impact on the harmonisation of transport policy in the countries of the Western Balkans region. This will have a major impact on regional cooperation as set down in the Transport Community Treaty. Transit regimes will improve, safety standards will be augmented with the adoption of the working time directive and safety standards will improve markedly within the region for all transport modes.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

There is a general consensus that this has been one of the best performing projects implemented in the transport sector and its success has been due very much to the choice of a twinning modality to implement the project and more importantly the quality of the twinning team, especially the Resident Twinning Advisor (RTA). The decision to chose a Twinning rather than a Technical Assistance approach was taken since the MoT wanted a team very experienced in transposing the *Acquis Communautaire* in new Member States, hence the choice of Lithuania; and with in-depth knowledge of the application of such laws and regulations in established Member States (MS), hence France. The fact that France had been involved in managing many twinning projects in accession counties made them an attractive proposition. The use of experts from Slovenia, Finland and Austria was also very useful.

In the first Monitoring report of August 2011 undertaken 6 months after start up, the project received a mark of A for efficiency reflecting sound management and organisational structures, flexibility in adapting to new needs such as the request to draft 6 laws within a very short period of time, and reorienting the training programme to study tours rather than internships. Although there had been initial delays in designing the Management Information System (MIS), these matters were eventually resolved. The working relationship between the RTA and the MS experts and the beneficiaries were excellent in terms of interaction and co-operation.

In terms of meeting the specific project targets and benchmarks, the total number of mandays consumed was 747 compared with 702 originally envisaged and this was due to the request for an extension made at the instigation of the GoS to draft 2 bylaws on intermodal transport which extended the project duration by 3 months to February 2013. In total, 10 rather than 4 Primary Laws were drafted and the MIS was installed and operational at the project's end when it was originally envisaged that it would only be designed. The extension of the project by 3 months was carried out within the original budget.

Flexibility was essential in the implementation of the project and the team were able to adapt when the LAP was put on hold to meet with an urgent requirement to draft 6 Primary Laws; and when the development of the MIS was stalled by the team's inability to access the IT Common Body due to lack of facilities within the MoT.

How well were the selected contract linked to other contracts and whether other contracts could deliver better results?

There was clearly a link between this twinning contract and the one funded under the CARDS 2005 programme with Austria and Germany, which had some significant failings. The decision to use Twinning rather than TA was taken since the GoS felt that the use of experienced in-house experts from the founding Member State and one of the newer Member States would be more beneficial and provide access to Member State institutions and a core of experienced staff. Given the outputs from this project and its very complimentary monitoring report, this decision would appear to have been vindicated. In the light of the success of this project, MoT is about to launch one Twinning Light project and hopes to have additional assistance for another major Twinning project.

There was a strong link between this project and the IPA 2007 project "*Technical Assistance for the implementation of the European Common Aviation Area Agreement in the Republic of Serbia*" which is now complete.

Was donor assistance aligned and complementary with each other?

In terms of other projects that were implemented in the same legislative field by the EU and other donors, the following are of relevance:

a) The IPA 2007 project "*Technical assistance for the implementation of the European Common Aviation Area Agreement in the Republic of Serbia*" is now completed. The project supports the Serbian aviation authorities in meeting all the requirements of the European Common Aviation Area Agreement (ECAA). It has carried been carried out in close co-operation with the Civil Aviation Directorate (CAD) and the Ministry of Transport.

This was complementary to the work carried out under this project with a specific mandate to assist in the implementation of the ECAA.

b) *First Alignment with the Transport Acquis*, EAR 2005. Signed with the Administrations of Austria and Germany, this was the forerunner of the second Twinning project and assisted in the preparation of new draft laws and provided information on how the Transport *acquis* was implemented in Member States. It also analysed Serbian legislation and made recommendations on the drafting of new laws.

c) The *Institutional Capacity Building Project in the Transport Sector (2005)* provided a gap analysis of EU transport legislation and Serbian transport legislation.

To what extent did the benefits justify the costs?

Clearly, the benefits have justified the costs (€1.5 million) since without this assistance, the body of laws necessary for compliance with the *acquis communautaire* would not have been drafted and Serbia would struggle with its candidacy for Membership of the EU. Given the volume of work undertaken with 10 primary laws and 44 bylaws drafted, a Training Needs Assessment undertaken and a comprehensive training programme provided together with a Management Information System established, the outputs would appear to have more than justified the costs.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The indicators set down in the Log Frame Matrix have been met and exceeded. The number of Laws and bylaws drafted were 10 and 44 respectively across all modes and extended to intermodal transport and the carriage of dangerous goods. 27 seminars/workshops were held with 370 transport experts participating and 10 study tours to Lithuania and France undertaken with 68 participants compared with the 2 planned in the original workplan. Their impact on the sector has been substantial and addressed gaps in the legislation for compliance with the transport acquis, trained staff and established a functioning MIS allowing the tracking of the compliance with EU Directives and the monitoring of the implementation of EU projects.

Was the balance of responsibilities amongst stakeholders correct and adequate?

In terms of management responsibilities, the presence of a beneficiary country (BC) Counterpart RTA was an essential element in ensuring coordination and delegation of responsibilities for the project. Additionally, the addition of 5 core counterparts to work alongside the key experts was essential. In terms of monitoring progress on the project, Steering Committees, comprising representatives from the BC and MS teams and the EUD met quarterly with minutes circulated well in advance. In drafting the Laws and bylaws, working meetings with all relevant transport directorates were also essential to ensure consistency in approach and stakeholder involvement by agencies ultimately responsible for enforcing the legislation.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

Gender balance was built into the Project Fiche with the project open on equal terms to all natural and legal persons of the Member States. Environmental issues were also addressed since the drafting of the Laws and bylaws included elements directly focused on improving the environment. Improvements in public transport through the enactment of the laws will have a direct benefit on minorities and vulnerable groups through cost reductions and improvements in accessibility.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

In terms of the 3 core elements of this twinning project, the following has been achieved:

a) Component 1

Some 626 of the 747 days used on this project were for Component 1 and this provided the bulk of the inputs.

In total, 10 primary laws have been drafted and 44 bylaws. In the original contract, only 4 primary laws were envisaged and secondary legislation drafted for each transport mode.

The primary laws drafted comprise the following:

Road Sector

- Law on Carriage of Passengers in Road Traffic
- Law on Carriage of Goods in Road Traffic
- Law on Working Time of Professional Drivers and Tachographs.

Rail Sector

- Law on Railways
- Law on Railways Safety and Interoperability.

Inland Waterways

- Law on Maritime Navigation
- Law on Vessels Nationality and Registration
- Law on Amendments on the Law on Navigation and Ports on Inland Waters.

Aviation

- Law on amendments of the Air Transport Law
- Law on Obligations and Basics of Property Relations in Air Transport.

Five laws have been approved by the Government and voted by Parliament:

- Law on Obligations and Basics of Property Relations in Air Transport (RS official gazette 87/11)
- Law on amendments of the Air Transport Law (RS official gazette 57/11 and 93/12)
- Law on Maritime Navigation (RS official gazette 87/11)
- Law on Vessels Nationality and Registration (RS official gazette 10/13)
- Law on amendments on the Law on Navigation and Ports on Inland Waters (RS official gazette 121/12).

The Law on Railways is in the process of finalisation and is to be presented to the Government soon.

The Law on Railway Safety and Interoperability will be completed after adoption of the Railway Law by the Government. The Law on Carriage of Goods in Road Traffic is in the process of finalisation and is to be presented to the Government shortly. The Law on Carriage of Passengers in Road Traffic is under public discussion.

44 bylaws were also drafted for Road Transport (8), Road Safety (9), Rail Transport (9), Waterways (7), Aviation (3), dangerous Goods (5) and Intermodal (3). Many of these have not yet been approved and the benefits are difficult to assess at this stage. There have, however, been some developments.

In the road sector, the digital tachograph system was introduced in January 2012 and the Road Traffic Safety Agency started issuing memory cards for digital tachographs. The agency has also increased its staffing to 47 with 65 envisaged. A Road Safety Coordination Body was also established in September 2011 to coordinate the work on reducing the number of traffic accidents.

Rail transport has seen little progress and the restructuring of JSC Serbian Railways has not yet materialised with the EU project suspended due to lack of progress and the Law on Railways and the Railway Safety and Interoperability still not adopted. The Railway regulatory body and the independent accident investigation body have still not yet been set up.

There has been little progress in the area of intermodal transport despite the drafting of two bylaws and the completion of a feasibility study for an intermodal terminal in Belgrade in March 2012. Delays in approving the Urban Plan for the proposed terminal is a major stumbling block to proceeding with this project.

Good progress can be reported in the area of air transport with 22 regulations implementing the Law on Air Transport now published.

The updating of the Legal Action Plan (LAP) was postponed until the end of the first year due to the Minister's request to draft 6 key primary Laws quickly. Nevertheless, the Assessment Table developed in the previous twinning programme was applied to assist in the gap analysis.

b) Component 2: Training

A Training Needs Assessment (TNA) and the delivery of a comprehensive training programme were key elements. The TNA was undertaken and included a review of training included in the previous twinning exercise carried out under CARDS 2005 together with interviews with senior and middle level managers. As a result 27 Seminars/Workshops were held with some 370 Serbian experts involved. In addition, 10 study tours were organised to France and Lithuania involving some 68 transport experts. It

was, however, decided to substitute more study tours than the original 2 envisaged in place of internships. Whilst the focus of the study tours on France and Lithuania was understandable given the nationalities of the consultants and the agreement with France and Lithuania, it might have proved useful to include other Member States as well, especially the newer members of the EU.

c) Component 3: MIS

A Management Information System (MIS) was a core element in the twinning contract and it was envisaged that this was to be designed as part of the workplan. In effect, the MIS was designed, installed and now functions, providing access to data on EU Directives and the transposition of Serbian Law, to achieve compliance with the Transport acquis. It also allows for the monitoring of IPA projects being implemented. Whilst this is a first step in developing a monitoring system, significant steps need to be taken to enable the system to provide real time access to data that will permit effective monitoring. The transition to DIS at the end of the year should act as a catalyst to developing such a system, which is essential for effective monitoring by the MoT.

To what extent did the assistance impact on the overall strategic goals of the sector?

In terms of achieving compliance with the Transport acquis, this twinning project has made major steps in drafting essential Laws and bylaws and ensuring that staff in the transport sector is fully conversant with principles and enforcement measures. It also provided a MIS to track EU Directives and the compliance of Serbian legislation.

The key issue, however, is the degree to which the Laws and bylaws have been enforced and whether the institutions responsible for this have that capacity and mandate. The sheer scale and quantity of new legislation being added to the statute books places an enormous burden on these institutions.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

The legislation drafted under the twinning project is designed to apply to the whole territory of Serbia and to be aligned with similar legislation in the Western Balkans region to ensure harmonisation and consistency. With the recent accord with Kosovo and Serbia's Candidate status, this will promote increasing co-operation in the area of transport policy.

Were there additional negative or positive impacts?

Negative impacts relate to the failure to approve the laws to date. Additional positive impacts relate to the drafting of 10 rather than 4 Primary Laws, the decision to substitute study tours for internships and to the establishment of a fully functioning MIS rather than just a design as was originally envisaged. As was highlighted in the point above, enforcement is a key issue and institutional weaknesses impact on the full implementation of these laws and bylaws.

Were there measures which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

The key issue is to ensure that all outstanding Laws and bylaws are approved by the Government. It is recognised that governmental changes have impeded approval of some of the Laws. Pressure therefore must be levied to ensure that these are placed on the statutes and that the bylaws are also approved by the Government. With regard to the MIS, it is important that regular updating of the database is undertaken and that the additional database on project monitoring has access to key data to enable it to monitor implementation effectively.

Were the indicators suitable, appropriate and SMART?

The Indicators provided in the Logical Framework Matrix were Specific in that they clearly specified the results expected: 1) Priority laws and bylaws drafted; 2) Training of staff provided and 3) Management Information System and Internal system of communications and procedures designed. They also gave Objectively Verifiable Indicators (OVIs) that were Measurable and Available - number of laws and by-laws drafted in alignment with the acquis and the LAP; Number and quality of training sessions and number of staff trained; Degree of progress towards a functioning/accessible MIS. They were also Time-Bound and set down in the work plan and the initial Inception Report. Their Relevance is also clearly

stated in the overall objective and the project purpose, which is the harmonisation of Serbian legislation with the Transport acquis. The final report of the twinning project refers to their compliance with the indictors set down in the Log Frame Matrix. Elements however that are perhaps missed as an indicator include the issue of enforcement and obviously the speed at which Laws move from the drafting stage to formal approval by the Government.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

A number of events have been held to promote the project including the following:

a) Kick Off Meeting:

This was held on January 27th 2011, on behalf of the State Secretary of Transport and with the presence of Mister Vincent DEGERT, EU Ambassador in Serbia, and Mister Francois Xavier DENIAU, French Ambassador in Serbia. Press and stakeholders were invited.

b) Intermodal Seminar:

A seminar was held to promote the intermodal transport project and a large number of stakeholders invited.

c) Final Event:

This was held on the 22nd February 2013 at the National Bank of Serbia. A CD containing all relevant documents was distributed.

To what extent has IPA impacted on transport safety and accessibility?

Many of the legal provisions included in the primary laws, and indeed the bylaws, impact on safety and accessibility. For example, issues related to the introduction of tachographs are specifically designed to improve safety by regulating driving hours for truck drivers. Equally, the Law on Railway Safety and Interoperability is essential to ensuring international standards. Many of the Laws will introduce measures to improve efficiency and reduce accidents and this will have a very positive effect on safety. The issue that still needs to be addressed, however, is that of enforcement.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

A Road Traffic Safety Agency has been established and has increased its staffing to 47 with 65 envisaged. A Road Safety Coordination Body was also established in September 2011 to coordinate the work on reducing the number of traffic accidents.

Rail transport has seen little progress and the restructuring of JSC Serbian Railways has not yet materialised with the EU project suspended due to lack of progress and the Law on Railways and the Railway Safety and Interoperability still not adopted. The Railway regulatory body and the independent accident investigation body have still not yet been set up.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

The project was implemented with secured national budgets to ensure sustainability.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

A wide range of training programmes (seminars, workshops etc) were held to build up capacity in the beneficiary institutions and working groups were a key component in the drafting of new legislation. The establishment of specific bodies such as the Road Safety Agency and the Road Safety Coordination Body are positive developments.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Clearly, the Training Needs Assessment (TNA) carried out by the team identified the key areas where assistance was needed in capacity building to ensure that future Laws could be drafted and the specific Laws drafted under this contract could be moved quickly onto the statute books and, more importantly, enforced. 27 Seminars and 10 study tours involving over 438 transport experts have not only provided core information on critical issues to be addressed but have also exposed key decision makers to working practices overseas. It has also helped to build strong working relationships with their respective counterparts in overseas Ministries.

With regard to developing Regulatory Bodies to enforce these Laws, there is a Road Traffic Safety Agency and a Road Safety Coordination Body but we are not sure about their mandate and regulatory powers. For the Railway sector, neither a Railway Regulatory Body nor an independent Accident Investigation Unit has been introduced. This is clearly an area that needs to be addressed.

5.7 IFI

5.7.1 EIB: 2009 Belgrade City, Sava Bridge

The overall project consists of the construction of a new bridge across the Sava river in the centre of Belgrade, with associated road sections linking it to the city road network. The bridge and associated roads form the first phase of an inner city semi-ring road. The bridge was opened to traffic in January 2012 although the access roads are yet to be completed. Completion of the access roads is now expected by the end of 2014. The bridge provides increased capacity for local and transit traffic and is planned to include a light rail line in the future.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

By providing a new high quality link across the Sava river, the project should contribute to the EU goal of reducing road casualties and improving safety.

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The project does not respond directly to the priorities identified in the NPI. However, it does respond indirectly in that the new bridge and associated road infrastructure has been designed to modern standards that lead to improved road safety. Furthermore, the new route through the city will provide relief to other routes (especially the river crossings) resulting in improved safety and travel conditions on those other routes.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The total cost of the project is EUR 405m, distributed between the City of Belgrade (33%), the EIB (37%) and the EBRD (30%). The EIB element of the total financing is being used for the construction of the access roads, while the EBRD financed the construction of the bridge. The support was thus coherent and complementary.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

While the bridge initially provides new infrastructure for road transport, it will ultimately include urban rail element.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Regional cooperation is not relevant to this specific project.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

Construction supervision is ensured by the City of Belgrade through the Land Development Agency of Belgrade (the PIU). Given the importance of the project and the relative inexperience of the promoter with such complex operations, it was deemed necessary that the local PIU be assisted by consultants with international experience. Following an international competitive tender, the Louis Berger Group was awarded the contract. However, significant delays to the completion of the project indicate inefficiencies.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

There were clear and inextricable links to other (parallel) contracts in the construction of the total project, in that the EIB financed the access roads while the EBRD financed the bridge.

Was donor assistance aligned and complementary with other donor assistance?

This contract was aligned and complementary to the EBRD financing of the bridge. Thus, the two contracts can be seen as aligned and complementary.

In a wider sense, the combination of financing from various donors and financing agencies (City of Belgrade, EBRD, EIB) indicates a high degree of complementarity.

To what extent did the benefits justify the costs?

A feasibility study was carried out in 2005 that included a cost-benefit analysis (CBA). This analysis estimated the net present value (NPV) to be EUR 157m and the economic internal rate of return (EIRR) to be 12.4%. These indicators suggest an economically viable project for which the benefits justify the costs.

However, the investment cost considered was EUR 127m, less than half of the eventual estimated total investment cost (even when excluding taxes, additional contingency costs and interest payments). Meanwhile, the unit values used for benefits (mostly time savings, but also including a small element from fuel savings and other operating cost savings) in 2005 were of an order of magnitude that would be appropriate at current prices i.e. in 2013. That is to say, while the cost of the bridge increased by a factor of 3, the value of the benefits did not increase by a corresponding amount. Thus, increasing the cost while maintaining the same order of magnitude of benefits would inevitably lead to a much reduced NPV and EIRR.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

Since the access roads are not fully completed, the bridge is not yet operating at its full potential. The feasibility study for the project forecast peak hour traffic flows as shown in the table below. Information

about current traffic volumes on the bridge was requested from Belgrade Land Development Agency but was not provided.

Table 5.1: Forecast traffic volumes on the Sava bridge

Year	Peak	Veh/hr
2009	am	3550
2009	pm	3750
2029	am	4850
2029	pm	5650

Source: Feasibility Study

Was the balance of responsibilities amongst stakeholders correct and adequate?

No information on the balance of responsibilities was obtained.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

The project was subject to a full environmental impact assessment (EIA) with public consultation. This was completed by international consultants in 2005. Some impacts were identified on non-protected natural sites and clearance of these issues was a precondition for disbursement by the EIB.

A major issue related to spontaneous settlements that had been established in the vicinity of the project. In particular, these caused significant delays to works on the northern approach roads. Disbursements by the EIB were blocked in 2012 due to a lack of progress in adopting the resettlement plan.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

As the access roads to the bridge are not yet completed, the bridge does not yet deliver the desired and expected benefits. Nevertheless, the bridge already enhances the transport network of Belgrade, helping to alleviate its growing traffic and associated congestion, air pollution and noise. It thus contributes to the development of sustainable urban transport.

To what extent did the assistance impact on the overall strategic goals of the sector?

Although requested, it was not possible to obtain the logical framework matrix. An indication of the overall strategic goals was obtained from www.savabridge.com: "to reduce traffic congestion in the City of Belgrade and increase capacity on the network a third major road bridge across the Sava River being part of the Inner City Semi-Ring Road". The extent to which the goal has been achieved is unknown as no traffic data was made available.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

The project does not contribute directly to the strategic objectives and priorities linked to reconstruction and reconciliation.

Were there additional negative or positive impacts?

No specific additional impacts were identified.

Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

The relative inexperience of the promoter with complex projects could have hampered the successful implementation of the project. In order to mitigate this, consultants with international experience were hired to assist the PIU.

Sustainability of the project could be hampered through lack of timely routine and periodic maintenance of the bridge and the access roads. In order to mitigate this, a specific TA was launched.

Were the indicators suitable, appropriate and SMART?

No indicators were obtained.

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

There is a comprehensive website about the project but no further information about visibility was obtained.

To what extent has IPA impacted on transport safety and accessibility?

The project will contribute significantly to transport safety and accessibility by providing new high quality infrastructure and contributing to the removal of transit traffic from the city centre where it interferes with city traffic.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

The project forms part of the road network of the City of Belgrade, managed by the Public Utility Company JKP Beograd Put. This company already maintains 4,000 km of urban roads, 630 km of regional roads and 550 km of local roads. It should thus have sufficient capacity to manage the additional infrastructure.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

The promoter's estimated cost of operation and maintenance (O&M) of the bridge and associated approach roads is EUR 1.7m per year. Most of this would be required for the maintenance of the bridge structure. Some savings could be expected from the newly rehabilitated Gazela Bridge, due to lower maintenance costs resulting from the rehabilitation works and lower traffic volumes resulting from transfer of traffic to the Sava Bridge.

A specific TA was launched to ensure performance-based maintenance of the road network including the bridge.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

Not applicable to this specific project.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable to this specific project.

5.7.2 World Bank / EBRD / EIB / Hellenic Bank: 2009 Corridor X Highway Project

The construction of various sections of the Serbian southern branches of Corridor X towards the borders with Bulgaria and FYROM are being financed by the World Bank, the EBRD, the EIB and the

Hellenic Plan. Construction supervision is being funded by the World Bank and the EU, while the Government of Serbia is responsible for the costs of expropriation.

This analysis will focus predominantly on the WB elements of the overall project, with reference to other IFIs and agencies where appropriate. A summary of the overall funding is shown in the tables below.

Table 5.2: Financing of Corridor X - E75 Grabovnica - Levosoje

Section	Length (km)	IFI	IFI funding (EURm)	Supervision	Supervision funding (EURm)
Grabovnica - Grdelica	5.60	WB	23.78*	WB	3.72
Grdelica - Caricina Dolina	11.80	EIB	144.1	EU	2.37
Caricina Dolina - Vladicin Han	14.30	EIB	182.3		2.44
Vladicin Han - Donji Neradovac	26.30	WB	73.82*	WB	**
Donji Neradovac - Srpska Kuca	7.95	HiPERB	21.85*	WB	**
Srpska Kuca - Levosoje	8.06	HiPERB	53.9	WB	**

Table 5.3: Financing of Corridor X - E80 Prosek - Bulgarian border

Section	Length (km)	IFI	IFI funding (EURm)	Supervision	Supervision funding (EURm)
Prosek - Crvena reka	22.50	EIB	96.41*	WB	8.53
Crvena reka - Ciflik	12.70	EBRD	43.04*	WB	***
Ciflik - Pirot (East)	28.70	EIB	124.3	EU	2.29
Pirot - Dimitrovgrad	14.30	EBRD	28.25*	WB	***
Dimitrovgrad - Bulgarian border	8.70	WB	68.05*	WB	***

* Accepted contract amount
** There is one contract for supervision services on construction of Highway E75 (except on sections funded by EU) and those services are financed by WB
*** There is one contract for supervision services on construction of Highway E80 (except on section funded by EU) and those services are financed by WB

World Bank funding for the southern sections of the Corridor X highway includes four components.

Component 1 (EUR 113m) is funding the construction of two sections of motorway totalling 31.9km in Corridor Xd towards the border with FYROM (E-75). Specifically, the sections are:

- between Grabovnica and Grdelica (5.6km)
- between Vladicin Han and Donji Neradova (26.4km).

Component 2 (EUR 160m) is funding the construction of an 8.7km section of motorway between Dimitrovgrad and the Bulgarian border in Corridor Xc (E-80).

Component 3 (EUR 3m) is supporting the implementation of the May 2009 Road Safety Law in the establishment of a Lead Agency, the development of a national road safety strategy, and the creation of a road safety performance framework.

Component 4 (EUR 14m) is providing Implementation Assistance and Institutional Support: This component provides support to implementation, including the supervision of the civil works, the supervision of the environmental and expropriation aspects of the project, and other necessary operational expenses.

Construction of the four lots of Component 1 began in May 2012 but progress has been slow due to delays in expropriation.

Completion of 2 of the 3 lots of Component 2 (roads and bridges) has reached over 75% but construction of the tunnels is delayed.

Progress in the implementation of Component 3 is judged to be satisfactory.

The overall project is due to be completed by the end of 2015 and it is expected that the development objective remains achievable within the Project's duration.

Relevance

To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process and EU Transport Policy?

EU Transport Policy is set out in the White Paper on transport "Roadmap to a single European transport area - towards a competitive and resource-efficient transport system" (2011). The projects involve key sections of Corridor X that will be operated as a toll road. The projects are relevant and aligned to several of the 10 goals designed to guide policy actions including:

- development of the multi-modal TEN-T network
- reduction of road casualties and improvement of safety of all modes
- moving towards the principle of "user pays".

To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?

The project responds to the following priorities identified in the NPI:

- short term priorities for road transport
    - road safety
- medium term priorities for road transport
    - road safety
    - completion of Corridor X
- priorities for the development of the Trans-European transport networks
    - raising the standard of the road Hungary border - Belgrade - Nis - Bulgarian border / FYROM border.

To what extent was support provided by the EU coherent and complementary to the national budget and other donors?

The EU is financing the construction supervision of three sections financed by the EIB and is thus complementary.

Was the mix of assistance to each transport mode (road, rail, air, intermodal, horizontal) balanced and geared to strategic objectives?

The assistance applies to an individual project in the road sector.

Has Serbia established medium-term achievable goals (laws, regulations, institutions etc.) related to alignment with the EU transport acquis?

Not applicable to this specific project.

To what extent has regional cooperation been addressed in transport policies and programmes?

Completion of the motorway branches will improve cross-border transport infrastructure. Regional cooperation is also addressed through an EBRD financed TA element of the project which will make recommendations for simplifying border-crossing procedures and develop an Action Plan.

Efficiency

To what extent were the donor's chosen implementation modalities efficient?

There is excellent cooperation between the various IFIs and Corridors of Serbia (CoS), with regular meetings taking place. Meetings between representatives of a particular IFI and CoS are often attended by representatives of other IFIs.

Construction delays that have arisen have mostly been due to delays in the production of design documents and expropriation, both of which are the responsibility of Roads of Serbia. Delays in expropriation are mainly due to a lack of funding on the part of Government of Serbia.

How well was the selected contract linked to other contracts and could other contracts have delivered better results?

The Government of Serbia asked the World Bank to act as lead partner amongst the donors in the preparation of the entire Corridor X programme, and contribute in parallel to the financing of the programme. The total cost of the Corridor X programme is estimated at EUR 1.3 billion, of which the World Bank will be contributing EUR 275.2 million (US$388 million equivalent) in a project co-financed with the Government of Serbia with parallel financing from the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

Alternative construction options were considered, including the phased construction of carriageways and reduced standards, but these were rejected as the cost savings were small and the reduced standards were incompatible with Serbian law.

Was donor assistance aligned and complementary with other donor assistance?

Under implementation, the Bank is formally responsible only for the supervision of those sections where it is contributing to the financing, but at the request of the Government, harmonised bidding documents and World Bank Procurement Guidelines are being followed by all the IFIs.

In addition, the other IFIs agreed to harmonise financial management requirements, reporting requirements, and safeguard policies and procedures with those of the Bank for their respective parallel financed sections.

To what extent did the benefits justify the costs?

During project preparation the World Bank led the assessment of the technical and economic viability of the project, the review of the social and environmental aspects of the project, and the review of the proposed design.

The economic evaluation was undertaken:

- at a corridor level for the whole IFI funded programme ie. the construction of 83 km of motorway on the E-80 corridor and the construction of 74 km of motorway on the E-75 corridor
- and at a section level for the three World Bank funded sections.

WB Component 1 involves the construction of 31.9 km of motorway in two sections between Grabovnica and Levosoje (Corridor Xd), half on new alignment, half involving an upgrading of the existing road. This component accounts for approximately 46% of total project costs and the Net Present Value (NPV), using a 12% discount rate, was estimated at EUR 25.9m with an Economic Internal Rate of Return (EIRR) of 12.6% at the corridor level, and an NPV of EUR 64.5m and EUR -0.27m, and EIRR of 18.3% and 11.9% respectively for the two sections.

WB Component 2 involves the construction of 8.7 km of motorway on a new alignment to the north of the town of Dimitrovgrad close to the border with Bulgaria. This component accounts for approximately 37% of total project costs and the NPV, using a 12% discount rate, has been estimated at EUR 32.6m with an EIRR o f 12.7% for the entire corridor, and an NPV o f EUR -31.21m, and an EIRR of 5.9% percent for the specific section.

Overall, therefore, it can be stated that the benefits justify the costs.

Effectiveness

To what extent has financial assistance been effective in achieving sector results?

The project has not yet been completed. Therefore, no results have yet been achieved.

Was the balance of responsibilities amongst stakeholders correct and adequate?

It is not clear that benefits have been gained by removing responsibility for development of Corridor X from PE Roads of Serbia and giving the responsibility to Corridors of Serbia.

Were cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into projects and programmes?

The borrower prepared two Environmental Impact Assessments. The environment along the proposed road alignment of the section of the corridor towards the Bulgarian border is not classified as sensitive or particularly valuable in terms of biodiversity or ecological significance, except within the vicinity of the Sicevo Gorge, the Jelasnica Gorge and the Grdelica Canyon. This is not a protected area but it has ecological and biodiversity significance as a refuge for tertiary vegetation where significant populations of some endangered plant and animal species are known or likely to be found. This will be mitigated by the introduction of designated box culverts and piped underpasses to serve as especially designed crossings for animals in areas where the larger animal groups exist, as well as along the already observed routes.

While Serbian law regulating resettlement is considered to be among the best in the region, there are still gaps pertaining to international best practice and World Bank standards. In order to address these gaps, Serbia has developed a Resettlement Policy Framework (RPF) for Corridor X, including the sections financed by the World Bank. The formal responsibilities of the World Bank in this respect only apply to the sections that it is financing in whole or in part.

The RPF describes the policies, procedures and processes that will be followed throughout the programme and the project in the course of compensation/resettlement of persons affected, with and without legal title, whose land/properties or businesses are acquired for the execution of the program and the project.

Impact

Were the immediate results delivered translated into the desired and expected benefits?

The project has not yet been completed. Therefore, it is not possible to state at this time that the immediate results delivered translated into the desired and expected benefits.

To what extent did the assistance impact on the overall strategic goals of the sector?

The project has not yet been completed.

To what extent did the project contribute to the strategic objectives and priorities linked to reconstruction and reconciliation?

During the years of sanctions and conflict, little maintenance of the road network was carried out. Consequently, the condition of the network deteriorated leading to increased costs and reduced safety. Recovery is now in progress with further development of the network also taking place. Completion of Corridor X will contribute to reducing this backlog of work.

Were there additional negative or positive impacts?

The project has not yet been completed.

Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate impact?

The impact and sustainability of the project could be hampered by the deteriorating economic climate, protracted delays and eventual competition from the rehabilitated railways.

Were the indicators suitable, appropriate and SMART?

Monitoring and evaluation of results and outcomes of the Project are carried out by the staff of the implementing agency, Koridor 10 d.o.o., supported where necessary by PE Roads of Serbia. This includes review and monitoring of the Project performance according to the established Results Framework and Monitoring indicators. Performance is assessed through a number of quantitative indicators and qualitative assessments. Indicators are measured against the agreed targets and are compared to the baseline established during project preparation.

Although the project is not yet completed, the project documentation includes regular reporting of indicators. They are shown in the table below as at October 2012.

Apart from an apparent incorrect unit of measure for the first two indicators (% instead of EURc/veh.km), they would appear to be suitable, appropriate and SMART. They are clearly presented with the name and description of each indicator along with the unit of measure. Baseline values are provided for each indictor for a specific date, and are followed by current and target values for a specific future date (project completion).

Table 5.4: Corridor X indicators

Project Development Objective Indicators						
Indicator Name	Core	Unit of Measure		Baseline	Current	End Target
Road User costs for road section Nis-Dimitrovgrad	☐	Percentage	Value	1.31		1.00
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction ongoing	in Euro cents per veh-km
Road user costs for road section Grabovnica to Donji Neradovac	☐	Percentage	Value	1.07		1.00
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction ongoing	in Euro Cents per veh-km
Reduce rate of road crash related death and serious injury for road section Nis Dimitrovgrad	☐	Percentage	Value	44.10		39.70
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction on going	Ten percent less at end of project.
Reduced rate of road crash related death and serious injury for road section Grabovnica and Donji Neradovac	☐	Number	Value	53.34		48.06
			Date	31-Dec-2008	31-Oct-2011	31-Dec-2015
			Comments		Construction not started yet on this section.	
Action Plan for Reform of PEPS adopted	☐	Yes/No	Value	No	No	Yes
			Date	31-Dec-2008	31-Oct-2011	31-Dec-2015
			Comments		Draft final report submitted to government for comments	
National Road Safety Strategy developed and launched	☐	Yes/No	Value	No	No	Yes
			Date	31-Dec-2008	31-Oct-2011	31-Dec-2015
			Comments		Activity ongoing	
Intermediate Results Indicators						
Indicator Name	Core	Unit of Measure		Baseline	Current	End Target
Roads constructed, non-rural	☒	Kilometers	Value	0.00	0.00	40.00
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction ongoing.	
Number of km constructed/upgraded for E-75 section	☐	Kilometers	Value	0.00	0.00	32.00
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction ongoing	
Number of km constructed/upgraded for E-80	☐	Kilometers	Value	0.00	0.00	9.00
			Date	12-Jun-2009	23-Oct-2012	31-Dec-2015
			Comments		Construction ongoing.	
Lead agency for road safety established and operational	☐	Yes/No	Value	No	Yes	Yes
			Date	01-Oct-2009	23-Oct-2012	31-Dec-2015
			Comments		Lead Agency established under new Road Safety Law, and is operational.	
Two road safety pilot projects implemented	☐	Yes/No	Value	No	No	Yes
			Date	01-Oct-2009	23-Oct-2012	31-Dec-2015
			Comments		work progressing	

Has EU and donor assistance achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and the results of the programmes and projects?

All project documentation, including information on objectives and results, is available online and publicly accessible[3]. This includes:

- an overview of the project
- detailed project information
- information on overall financing and disbursements
- procurement notices
- a table of result indicators
- access to project documents.

To what extent has IPA impacted on transport safety and accessibility?

WB Component 3 explicitly addresses the issue of transport safety. The Component addresses:

(i) road safety capacity building to support the establishment of the National Road Safety Council

[3] http://www.worldbank.org/projects/P108005/corridor-x-highway-project?lang=en

(ii) creation of a road safety performance framework

(iii) developing and launching a national road safety strategy

(iv) preparation and piloting of two multi-sectoral road safety pilots

(v) the procurement and establishment of a road safety database and road safety equipment.

With regard to accessibility, Components 1 and 2 will impact directly on accessibility to, from and through south eastern Serbia.

Sustainability

Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?

WB Component 4 explicitly addresses implementation assistance and institutional support. It includes, inter alia, technical assistance to support institutional strengthening in PE Roads of Serbia through the development of a reform action plan.

Were adequate measures introduced to ensure the financial sustainability of the projects and programmes in general?

Users of the motorway will be charged tolls, which will be used for loan repayments and to cover maintenance costs. PE Roads of Serbia will be responsible for toll collection and maintenance, but it is not clear what analysis has been done with regard to the balance between toll revenues and the costs of loan repayments and maintenance.

Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?

An element of the EBRD financing relates to implementation of an electronic toll collection system on the E-80, and providing a TA project, which will develop a Plan for the privatisation of toll collection.

Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it facilitated in developing regulatory bodies in the transport sector?

Not applicable to this specific project.

5.8 Bi-lateral funding

5.8.1 Germany - KfW: Modernisation and electrification of Pancevo-Vrsac (state border)

This railway project is no longer being implemented with assistance from KfW.

6 CONCLUSIONS

6.1 Conclusions

6.1.1 Overall assessment of relevance, efficiency, effectiveness, impact and sustainability

Table 6.1 shows the scores for each evaluation criterion by project and overall. It should be noted that the overall score cannot be related directly to the scores for individual projects since the overall scores include an assessment of additional projects that were not examined in detail.

a) Relevance

The specific evaluation questions with respect to ***Relevance*** relate to the degree of alignment of ODA with EU accession priorities and transport policy; the extent to which the projects selected reflect the priorities defined in the NPI; whether there was complementarity in assistance amongst donors; whether the specific goals were achievable in the medium term and whether there was the appropriate balance amongst the various transport modes. In addition, there were supplementary questions with respect to linkages with trade facilitation measures and to the promotion of regional co-operation.

There is a clear **alignment** between the specific projects selected for assistance by the IPA and the donors with the over-arching goal of accession to the EU and as a corollary with EU transport policy as articulated in the White Paper on Transport Policy. Underpinning the strategic goals for the sector was *The Strategy of the Railway, Road, Inland Waterway, Air and Intermodal Transport Development in the Republic of Serbia (2008-2015)*, which was adopted by the Government of Serbia (GoS) in 2008. This document incorporates the principles of EU Transport Policy, the requirements of the Stabilisation and Association Agreements (SAA), the Community Strategy Guidelines on Cohesion, the National Plan for Integration with the EU (NPI) and the Multi-Annual Indicative Financial Framework (MIFF) 2007-2013.

In this respect, there was clear focus on the Pan-European Transport Corridors, especially Corridor X and to a lesser extent Corridor VII with its concentration on the Danube. The largest IPA allocation (€28.18) was provided for the supervision and construction of the Zezelj bridge at Novi Sad, a key link in developing the rail corridor as part of the TEN-T. This was the only works contract undertaken in this sector by IPA. Other assistance focused on supporting road construction projects for Corridor X through supervisory contracts; or for assistance with documentation for rail projects also on Corridor X. In addition, the System for Analysis of Track conditions for the railways, though somewhat premature given the poor state of the railways, will provide a valuable tool for future planning and investments in the railways.

For Corridor VII, a wide range of projects was launched to assist with navigation and improve safety on the Danube including the development of the RIS, the removal of UXOs near Prahovo and river training, all essential to improving navigability and focusing on the development of Inland Waterways and more sustainable and environmentally friendly transport infrastructure.

Table 6.1: Evaluation performance scores

Primary sector classification	Supervision of Belgrade bypass	PIU to Roads of Serbia	System of Track Conditions	Supervision of Zezelj bridge	Construction of Zezelj bridge	River Information Services	Removal of UXOs	ECAA	Inter-modal Transport	Harmonisation of Transport Acquis	Sava Bridge, Belgrade	Corridor X	Overall
	Road		Rail			Waterways		Aviation	Intermod.	Horizont.	IFI		Overall
Relevance	*2*	*2*	*2*	*1*	*1*	*1*	*1*	*2*	*1*	*1*	*2*	*1*	*1*
Efficiency	*2*	*1*	*3*	*2*	*2*	*2*	*3*	*2*	*2*	*1*	*3*	*2*	*3*
Effectiveness	*1*	*1*	*2*	*2*	*3*	*2*	*2*	*1*	*2*	*1*	*3*	*2*	*2*
Impact	*2*	*2*	*2*	*2*	*2*	*3*	*3*	*2*	*2*	*2*	*3*	*2*	*3*
Sustainability	*0*	*0*	*3*	*1*	*4*	*3*	*3*	*2*	*3*	*2*	*2*	*2*	*3*

0 = not applicable

1 = highly satisfactory

2 = satisfactory

3 = less than satisfactory

4 = highly unsatisfactory

Funding of horizontal projects was also aligned and vital given the needs of the accession process. Support to the implementation of the ECAA was critical given the time frame set for the transitional period following Serbia's signature of the agreement in 2006; and the second twinning project for the harmonisation of the acquis was fundamental to the drafting of key laws and bylaws for the transport sector affecting all transport modes. These also had a significant impact on developing institutional capacity, as did the support to the PIU at Roads of Serbia.

Support to the promotion of intermodal transport recognised failings in this sector and the need to broaden the scope of assistance with the focus on developing an intermodal facility in Serbia. Once again, this was a key ingredient of EU transport policy

Funding of horizontal projects was also aligned and vital given the needs of the accession process. Support to the implementation of the ECAA was critical given the time frame set for the transitional period following Serbia's signature of the agreement in 2006; and the second twinning project for the harmonisation of the acquis was fundamental to the drafting of key laws and bylaws for the transport sector affecting all transport modes. These also had a significant impact on developing institutional capacity, as did the support to the PIU at Roads of Serbia.

Support to the promotion of intermodal transport recognised failings in this sector and the need to broaden the scope of assistance with the focus on developing an intermodal facility in Serbia. Once again, this was a key ingredient of EU transport policy

With regard to the **complementarity** of other donor assistance, there is also a clear focus on Corridor X, which consumes over half of the allocated budget of the EIB (€579million) for the Motorway Phase 1 Nis-Cifilk and the E-75 , all of the World Bank budget for this period ($388 million) and €150 million from the EBRD for the K10 from Nis to Dimitrovgrad. EBRD also has a project to provide rolling stock for Corridor X valued at €100 million. This has been complemented with bi-lateral funding for Corridor X with the Hellenic Bank funding 2 sections at a cost of some €70 million.

EIB funding for the Belgrade bypass (€100 million) has been complemented by EBRD funding (€80 million) and supported by a supervision contract from IPA 2007 (€1.72 million). This project is located on Corridor X as well as on the European 'E' Roads, E 70 and E 75.

EIB funding for the Sava and Gazela bridges is also linked to overarching policies of developing strategic transport links and relieving congestion and improving safety.

With regard to whether there was a balance of assistance amongst the various transport modes, there has been a clear emphasis on developing the road sector for Corridor X and to a lesser extent the rail connections, which has moved at a much slower pace. Assistance to the Aviation sector has been mainly in the form of training, provision of equipment and legislation whilst the harmonisation of the acquis has covered all transport modes. Intermodal has been recognised as a sector that needs further support and it is hoped that the intermodal project will go ahead and provide a model for replication in other parts of the country. Whilst IWT received considerable funding for the RIS, removal of UXOs and the river training project, it is questionable whether there are sufficient funds available to promote this sector given the extensive investments required in infrastructure and the low volume of traffic on the river. Although a Master Plan for IWT was drawn up in 2005, there appears to be little enthusiasm, especially from the IFIs, for this project.

With respect to issues relating to regional cooperation, assistance to the IWT was part of a broader regional plan to develop RIS along the whole stretch of the waterway from the North Sea to the Black Sea and to complement this by ensuring a full navigable and safe waterway. Assistance with ECAA forms part of a EU wide agreement to harmonise air navigation policies amongst all EU Member States and the Balkans.

The issue of Trade Facilitation is an important element in developing intermodal transport, in harmonising customs procedures with neighbouring countries and one that needs additional attention if delays and inefficiencies are to be avoided.

The overall score for ***Relevance*** is 1, indicating that it was highly satisfactory and according to plan.

b) Efficiency

The questions that address ***Efficiency*** relate to whether the projects were cost effective and how economically resources/input (funds, expertise, time etc.) were converted to results(outputs and outcomes) Specifically, they consider whether the implementation modality selected resulted in an efficient project; the linkages to other contracts and whether an alternative contract might have been more appropriate; the alignment and complementarity of assistance; and the extent to which the eventual benefits justified the costs.

A majority of the IPA projects provided technical assistance or construction supervision. There were several projects that related to construction or supply, most significantly the steel structure for the new Zezelj bridge in Novi Sad and the supply of equipment for the implementation of the RIS on the Danube. There was a single twinning project that related to the harmonisation of the transport acquis.

The IFI projects mostly concern loans for the construction, mostly for road infrastructure, with some investment also in railway rolling stock. However, several of the road infrastructure projects include elements of technical assistance and construction supervision. Bi-lateral funding contributed predominantly to construction projects.

Overall, the modality selected was appropriate and no specific case was identified where an alternative modality might have been preferable. For the IPA projects, the twinning project for the Harmonisation of the Acquis Phase II proved very effective and an improvement on its predecessor and much of this was due to the quality of the RTA and his team of experts.

Many of the contracts are linked to, aligned with and complementary to other contracts. In some cases they are linked in parallel (e.g. a construction supervision contract financed by one donor for a construction project financed by the same or another donor; co-financing of separate elements of a single project); in others they are linked in series (e.g. construction of several adjacent sections of motorway). In the case of the Corridor X motorways, the linkages are complex, with several donors interacting through multiple construction, construction supervision and technical assistance contracts, Our findings were that there was a high level of complementarity and cooperation amongst the IFIs and bi-lateral agency involved.

With regard to the specific projects included in the sample, one would have to question whether the massive increase in the investment costs of the Sava bridge have been justified and whether the anticipated positive impacts have been achieved especially with respect to relieving congestion. There are also concerns about the project concerned with the System of Track Conditions, which may be somewhat premature given the poor state of the track and widespread need for reconstruction.

Given that the major proportion of infrastructure investment is loan-based albeit concessionary, there is a clear need to utilise these funds most efficiently. Unfortunately, this has not been the case and a huge back–log has occurred in disbursements and project completion for IFI –funded projects. These include:

- Belgrade bypass (2007): €14 million disbursed out of €60 million allocated. (EIB)
- Corridor X (E-75): No disbursement of €314 million allocated. (EIB)
- Belgrade Bypass (2010): €16 million disbursed of €40 million allocated. (EIB)
- Corridor X Motorway Phase 1 (Nis-Ciflik) (2010): €17.30 million disbursed of €265 million. (EIB)
- Supply of EMUs to Serbian Railways (2009): €1 million disbursed of €100 million. (EBRD)
- K10 from Nis-Dimitrovgrad (2009) €24.54 million disbursed of 2150 million (EBRD).
- Supply of Rolling Stock (2010); €1 million disbursed of €100 million (EBRD)

Even the Hellenic Bank has encountered major problems with the construction of the section Donji-Neradovac to Levosoje on Corridor X. This has caused a massive backlog in the disbursement of funds and the case of EBRD projects incurred costs amounting to some €2 million due to the delays. Reasons for these delays include the following:

- Weak project identification, preparation and implementation
- Contractual problems between contractors and financiers
- Poor and deficient documentation
- Delays in the issuing of construction permits
- Delays in planning approvals
- Problems with land expropriation and the failure of the GoS to make adequate provisions for these.
- Weak feasibility studies with over-optimistic traffic forecasts and the failure to provide for adequate maintenance costs

The overall score for ***Efficiency*** was 3, indicating that it was less than satisfactory and not sufficiently according to plan.

c) Effectiveness

Effectiveness considers the extent to which the development intervention's objectives were achieved, or are expected to be achieved taking into account their importance. The specific questions relate to the effectiveness with which financial assistance achieved its results, the appropriate balance of responsibilities amongst stakeholders and whether cross cutting themes had been adequately taken into account.

assistance itself.

The assistance generally has a satisfactory balance between stakeholders, and in some cases the relationship between stakeholders is complex. One project where a question of balance was raised was the construction of the new Zezelj bridge. SR questioned whether they should have had more influence in the project, for example by having a greater presence in the Steering Committee. With respect to Corridor X, there has been a high degree of cooperation amongst the various IFIs involved in project financing.

Cross-cutting issues are not relevant to all projects, but where they are relevant they have been considered with varying degrees of success. Environmental issues have generally been adequately dealt with since the major infrastructure projects required that an EIA be carried out.

The infrastructure construction projects will have an impact on regional and local development, the "soft" projects less so, except where they facilitate the "hard" projects. The development of Corridor X especially is likely to result in nodes of development around major intersections. Much emphasis is placed on attracting transit traffic to the route through Serbia, but transit traffic in itself should not be seen as a benefit - it adds to congestion, pollution and the cost of infrastructure maintenance, while putting little into the economy. However, if an efficient transport network is developed it will lead to regional development nodes that could potentially attract foreign business. The key to realising this objective is to ensure that the transport sector is not treated in isolation and the linkage to other sectors needs to be strengthened and reinforced. This will form a core element in the SWAp now being introduced.

The spontaneous settlements of minorities have caused issues with several infrastructure projects, delaying their implementation due to lack of progress in adopting resettlement plans. This has been a particular issue with the Sava bridge, where the failure to relocate a large Roma settlement has led to significant delays to construction of the northern access roads. Spontaneous settlements have also been an issue with construction of the Belgrade bypass (though not on the section B5 for which IPA assistance was provided). The issue of resettlement has been explicitly addressed by the World Bank in Corridor X through the preparation of a Resettlement Policy Framework that was adopted by all partners. It is important that future infrastructure projects take due account of these issues in the design phase and implementable policies are put in place before the commencement of the project.

Where appropriate, the human resource policies of all aspects of the assistance pay due respect to gender issues.

On the positive side, those concerned with improvement in the regulatory framework (Harmonisation of the Acquis Phase II) were very effective in drafting essential Laws and bylaws relevant to the transport sector as a whole and in developing a MIS for monitoring of EU transport Directives. In addition, support to the Civil Aviation Directorate was instrumental in ensuring compliance with the requirements for ratification of the ECAA. Support to the PIU to PE Roads of Serbia was also effective in strengthening capacity at this key institution. Supervisory contracts have also been effective.

One of the problems in determining effectiveness, however, is the long gestation periods for many of the projects and the time it takes to show real benefits. This is particularly the case with respect to large infrastructure projects.

Where problems have occurred, these are with respect to the construction of the Zezelj Bridge at Novi Sad funded by IPA, where significant delays have been encountered with respect to design at the commencement of the project; and more recently with contractual issues regarding unforeseen obstacles in the Danube.

As was mentioned in the previous sub-section of *Efficiency,* many of the IFI funded projects have extremely low disbursement rates due to a wide range of issues and this has significantly impacted on project and programme effectiveness.

The construction of the Sava Bridge raises issues with respect to the significant increase in costs and the potential benefits that will accrue to Belgrade.

The overall score for ***Effectiveness*** is 2 indicating, that on balance, the positive aspects outweighed the negative ones.

d) Impact

The evaluation questions that consider ***Impact*** are closely related to the logical framework matrices. As such they examine the immediate results, the strategic objectives, and indicators. Specific reference is made to reconstruction and reconciliation, transport safety and accessibility. The questions also address the visibility of projects and the specific impact on transport safety and accessibility.

The project fiches and more specifically the logical framework matrices are often poorly prepared. As projects have matured they have not been updated to take account of changes. Some refer to projects that consist of several components, which would benefit from having their own sets of indicators.

Not all the projects are completed and many projects are experiencing significant delays, caused by various problems including:

- delays in design
- delays in obtaining a construction permit
- delays in expropriation
- resettlement delays.

These delays mean that for some projects the expected benefits have not yet materialised. There appears to be a particular problem with the construction of the Zezelj bridge, where the contractor won the contract on the basis of a low price. Construction of the access roads to the Sava bridge has also encountered serious delays due to issues of resettlement and the project is thus not yet generating all the benefits expected. The RIS project has not yet generated the expected benefits due to the fact that the system has had to be shut down due to lack of funding for maintenance and the inability to negotiate internet contracts to date.. There are also doubts about the completion of the UXO project with 2% of the designated area still not yet surveyed to the prescribed depth.

It is expected that most of the projects will impact on the overall strategic goals of the sector, once they are complete. Clearly, some will do so to a greater extent, but there are none that will not do so. The project that contributes least would appear to be the Sava bridge, a highly expensive project that contributes relatively little to strategic goals.

A few projects - rebuilding of the Zezelj bridge, removal of unexploded ordnances - are directly related to reconstruction and reconciliation. Others are less directly relevant but contribute nevertheless. These include projects that contribute to the backlog of work required due to the fact that during the years of sanctions and conflict, infrastructure was not developed or maintained. Consequently, the condition of the infrastructure deteriorated. Several projects have few or no links - RIS, ECAA, harmonisation and the Sava Bridge.

As many of the projects are not yet complete, it is difficult to judge if there are additional negative or positive impacts. However, both the construction of the Zezelj bridge and the RIS will have additional negative impacts.

Apart from the World Bank Corridor X projects, most of the indicators are poorly specified or non-existent. Many are unsuitable or imprecise (e.g. “prices”, “quality … of documents”) and few are SMART. The indicators for the Belgrade bypass were supposed to have been verified through a sample survey carried out before and after opening but there is no evidence that this was done. Most of the indicators are vague and lack baseline and target values. Very few have a time-frame within which they are supposed to be measured, and some are simply not measurable in the form in which they are expressed (e.g. “skills of personnel”).

It was found that most projects follow EU guidelines with regard to visibility during project implementation, but are perhaps not achieving maximum visibility of strategic objectives and results. All projects mention the EU and/or IFIs in documentation and on websites. PE Roads of Serbia will shortly publish on its website a video about the Belgrade bypass. Conversely, SR showed less awareness of visibility requirements.

Most of the projects will impact on transport safety and accessibility, some directly .through high quality new construction; inclusion of specific safety measures), others indirectly (e.g. facilitation of new construction, facilitation of maintenance). There are still concerns about the safety aspects of the UXO project since the area under the landing bridges has not been surveyed to the depth of 6 metres as required.

The overall score for ***Impact*** was 3, indicating that it was less than satisfactory and not sufficiently according to plan.

e) Sustainability

The evaluation questions concerning ***Sustainability*** refer to the degree to which an appropriate administrative and institutional framework has been established, the extent to which financial sustainability had been adequately assessed and provided for; the capacity for policy making; developing regulatory bodies; and expertise in project planning etc.

With regard to the administrative and institutional framework to support the specific projects, companies like Roads of Serbia are adequately staffed with well-qualified technical staff and have a low turnover. This situation may change, however, as the private sector expands and becomes more attractive. Other companies such as Serbian Railways are extremely overstaffed and some rationalisation is urgently needed. The restructuring programme with the separation into 4 separate companies would have a positive impact on this.

At a broader level, the changeover to DIS at the end of the year will introduce the decentralised system of management of the projects and this will place considerable burdens on the relevant units in the Ministries. Significant efforts need to be made to ensure that these agencies are strengthened.

Many of the projects undertaken in this period have had as one of their core elements the training of staff in the beneficiary institutions. In the projects concerned with legislation, Harmonisation of the Acquis II and support to ECAA, extensive training programmes have been provided including workshops, seminars etc to raise the skill levels of decision makers and expose them to practices overseas through study tours. A core element in the Intermodal study was the exposure of key stakeholders to practices overseas and the managing of intermodal terminals.

With regard to financial sustainability, the feasibility studies referred to in the detailed analyses outline the viability of projects and their projected rates of return. For all World Bank, EBRD and EIB funded projects, detailed evaluations of projects are undertaken from a financial and economic perspective and form the basis of their decision-making process. The use of the WBIF facility and the PPF programmes have also been extremely useful in project evaluation.

Maintenance is a critical issue for financial sustainability. For Corridor X, it is envisaged that existing tolls will provide for maintenance costs and current revenues amount to over €160 million annually. With increasing transit traffic as the remaining sections are completed, it is envisaged that there will be a substantial increase in maintenance costs, which may not be covered by forecasted revenue estimates. It would be possible to increase the tolls but this may have a detrimental effect on traffic as transit traffic uses other corridors such as Corridor IV. One of the focuses of the current World Bank assistance programme is the development of an overall maintenance model that can be universally applied.

For the Zezelj bridge, it is envisaged that maintenance will be agreed between the City of Novi Sad and SR. For the Sava bridge, the estimated cost of maintenance and operation is €1.7 million per year, most of which is for the bridge structure, and a specific TA contract was launched to ensure performance-based maintenance of the road network including the bridge.

Certain problems have been encountered with the operation of the RIS with respect to operation and maintenance of the system including insurance and internet costs. Unless adequate funding is provided, then the system may need to be shut down as is the case at present. Adequate provision needs to be made for future support in the National budget and this should be a pre-condition of financing.

With respect to expertise in project formulation, there is an acute shortage of expertise in this field and donors are reliant on outside agencies to prepare documentation and feasibility studies. Studies tend to be of a purely technical nature and the concepts underpinning cost benefit analysis are lacking. The capacity to appraise projects from an economic and social perspective are distinctly lacking.

The overall score for ***Sustainability*** was 3, indicating that it was less than satisfactory and not sufficiently according to plan.

6.1.2 Strengths

a) Complementarity

For the period 2007 to 2011, there has been a clear focus and complementarity in assistance, certainly from IPA and the IFIs. Bi-lateral assistance from the Hellenic Plan has also been synchronised with funding from other agencies. The clear focus has been on Corridor X (Road and Rail) and this has absorbed the major proportion of funding in terms of grants and loans from the IFIs (EIB, EBRD, World Bank). Bi-lateral assistance from the Czech Republic to improve safety at level crossings complements intervention in the rail sector. Funding from the Chinese Government for the Zemun bridge provides an important river crossing near Belgrade but does not form part of the core accession strategy.

b) Balance of Funding

Certainly IPA funding has attempted to provide a balanced approach across the various transport modes, albeit mostly in softer measures supporting projects for Corridor X with supervision contracts, assistance with feasibility studies, support to PIU etc, although the supervision and construction of the Zezelj bridge is something of a radical departure from the traditional focus. Funding from the IFIs has been by contrast very much focused on Corridor X especially in the development of the core road and rail network. There has, however, been a reticence about funding projects related to IWT due to low traffic volumes and potential rates of return on investments.

Support to the improvement of navigation on the Danube with the RIS, the project to remove UXOs and the assistance with river training have been essential elements in developing the Danube as a sustainable and environmentally friendly transport artery.

Support to the development of an intermodal facility is a positive step in broadening the focus of transport assistance and relieving congestion of main arteries.

Assistance with harmonisation of the acquis and support to CAD with the ECAA have been vital elements in the harmonisation of legislation fundamental to the accession process.

c) Key Projects

With respect to those projects funded by IPA, the Twinning project for the Harmonisation of the Acquis Phase II has been one of the most successful projects in terms of its outputs, management, stakeholder involvement, collaboration and its flexibility. A wide range of key Laws and bylaws was drafted, far in excess of what was required in the original contract; and the training in the form of seminars, workshops, study tours were vital in developing capacity. The establishment of a Management Information System for tracking compliance with changing EU directives was also a key output. The ECAA project was also successful in supporting Serbia's compliance with the criteria for becoming a member of the ECAA.

The RIS project was also vital to the development of the Danube as a key transport artery with the establishment of real time information systems, electronic navigation charts etc. which will improve navigation, assist the customs administration and vessels travelling down the Danube.

Whilst the intermodal project has not materialised as yet and is waiting planning permission approval, it will provide the first step in developing viable intermodal transport in Serbia.

Most of the supervisory projects have performed and support to the PE Roads of Serbia with a PIU was effective in strengthening the capacity of this important institution.

With respect to IFI and bi-lateral funding support to the completion of Corridor X has been fundamental to developing a strategic backbone for the transport sector which will have major impacts on development in the country as a whole.

6.1.3 Weaknesses

a) Focus

Corridor X has been the overriding focus of funding and this will continue to be the focus of attention for the coming planning period. Questions have been raised over the concentration of funding in this rail and road artery and its wider impact on funding to other transport priorities and other sectors in the economy. Concerns have been raised over its financial sustainability given the high operational and especially maintenance requirements, as well as loan repayments.

IFIs have shown no interest in funding projects on the Danube River nor the development of inland waterways and this is clearly an impediment to developing the river. IPA support has clearly been essential in carrying out essential river training works and improving navigation but without massive funding in infrastructure the potential of the river will not be realised. The difficulty with changing this mind set is that the viability of the waterways depends very much on interventions from all countries along the waterway and synchronising these is a formidable obstacle.

b) Delays

Protracted delays in the completion of projects has been a key feature of ODA in the period 2007-2011. This is particularly the case where construction projects are involved but also applies to supply contracts as well. For the EIB, out of a total funding budget for the period 2007-2011 of €905 million, only 12% has been disbursed to date. For the EBRD, only 21% of the €430 million earmarked for the transport sector has been disbursed. For the World Bank , the figure is 7%. For the only construction project funded by IPA - the Zezelj bridge at Novi Sad - only €6.8 million had been disbursed at the time of the presentation of the Draft Evaluation report.

The reasons for the delays relate to difficulties with the expropriation of land both in legal and financial terms; excessive delays in issuing permits for works; problems with addressing issues relating to minorities; lack of project preparation and poor design; disputes amongst contractors; disputes between contractors and the GoS over payments; changes in institutional arrangements etc. There is also the issue of underpricing in bids to win contracts with contractors then unable to comply. This results in huge financial costs and in some cases, as with the EBRD project for the supply of rolling stock, the payment of arrangement fees, without any deliverables actually materialising.

c) Sustainability

At the project level, there must be a provision for the project to be sustainable once donor assistance has gone. In the case of large construction projects, especially those related to Corridor X, there must be adequate provision to operate and maintain the roads and railways and sufficient resources to repay the loans in terms of capital and interest payments. For Corridor X, estimated tolls currently amount to some €160 million annually and it is questionable whether the increase in traffic and the need for greater maintenance will be covered by the tolls. In the case of the Zezelj bridge, maintenance will be the responsibility of the city council and SR and it is incumbent upon them to find the funding to do this.

At the more micro level, issues relating to the support for the RIS on the Danube highlight another key difficulty, which will affect the river training works as well. RIS is shut down at present since there was no funding to negotiate internet contracts. Extensive river training works are not a one off project and on-going maintenance is an essential part of the process of sustainability. If maintenance and operational costs are not provided for, then the networks will deteriorate rapidly.

There are an enormous number of projects on-going at present or planned for the future, many involving huge capital costs and significant loan repayments. It is debatable whether a comprehensive financial model is in place to monitor debt repayments and to provide for adequate funding once the projects are completed and the donors have departed.

7. Recommendations

On the basis of the findings and conclusions in the preceding paragraphs, the consultants have made a wide range of recommendations. The first relate to the sector as a whole, whilst the second focus on specific recommendations related to the infrastructural and technical assistance projects. In this respect, we have mapped out the principal findings and have given a wide range of recommendations covering technical, institutional, financial/economic issues. We have also indicated the actions required to rectify the problems and the institution responsible as well as the timing in terms of urgency.

7.1 Sectoral Issues

7.1.1 Programming

Whilst it would be easy to be over-critical in hindsight with respect to the process of programming and the identification and selection of projects to be financed by the EU, it should be stressed that it was subject to extremely tight programming cycles that were initially annual and project-centred. The shift to Multi-Annual Indicative Programming Documents (MIPDs) at the commencement of the evaluation period was a positive step in that it provided a three-year planning horizon, albeit on an annual rolling basis, but these had limitations in that they were structured according to the Copenhagen principles of *political criteria, economic criteria* and *harmonisation with the acquis*. On the GoS side, the NAD set the framework for support and assistance requirements whilst the NPI provided the underlying policy framework. Problems that have arisen have largely resulted from pressures to commit to time schedules with projects selected without any real cohesive strategic framework.

The sector-base approach (SWAp) now being piloted under IPA 2012 and 2013 will be used as the guiding principle for the programming for IPA II covering the period 2014-2020. This should offer a number of distinct benefits including:

- greater inter-ministerial co-operation,
- a much more strategic focus for the programmes,

- better and more-streamlined co-ordination with IFIs and bilateral donors within the strategic policy framework,
- and the scope for greater consultation amongst stakeholders without the time constraints.

It will also provide performance-related targets that will underpin future assistance. The movement to a SWAp will require a much more strategic vision in programming, the need for much closer collaboration amongst Ministries and the reinforcement of collaboration with donors.

It will also require the introduction of more specific, sector-based indicators that will provide the baseline for the measurement of performance.

Much deeper monitoring and evaluation will also be needed.

7.1.2 Collaboration

Together with programming, there has been a fundamental change in collaborative mechanisms and the institutional framework for programme management. Most of these changes evolved towards the end of the evaluation period but are nevertheless important milestones. Firstly, Sector Working Groups have been established including one for transport and secondly Donor Coordination Groups have been formed, both under the auspices of SEIO which recognised the diversity in approach by donors and the need for harmonisation and symmetry with IPA programmes.

It is important that these two groups are strengthened and supported as a part of the sector- based approach and there is synchronisation in the projects supported. Regular contacts between Ministries and beneficiaries will also be crucial to harmonising policies and actions at the national level.

The last point is particularly important with respect to inter-Ministerial collaboration when SWAp becomes the norm. This will enable transport to be viewed from a sectoral perspective and programming geared to broad sectoral needs rather than being treated in isolation.

7.1.3 Management

Together with the shift to SWAp, there will also be fundamental changes in the management of programmes with centralised management under the EUD replaced by a decentralised management (DIS). This will mean that responsibility for tendering, contracting and payments will be devolved to the Serbian authorities. Whilst this is to be welcomed as a fundamental part of the process of accession, experience with other Candidate countries suggests that critical problems could develop unless institutions are reinforced. This does not just mean the key agencies like the Central Finance and Contracting Unit (CFCU) and the National Fund but also key units within the Ministries, especially the Sector for European Integration and International Co-operation. Certainly, steps need to be taken to ensure that this and other key institutions are prepared for the devolution of powers, which could take place by the end of this year (2013).

There is an urgent need to strengthen the agencies responsible for the management of EU funds in the light of the transition to DIS and the movement towards SWAp. This will place increasing pressure especially on the IPA Units within Ministries and new staff need to be recruited and project preparation/evaluation skills strengthened. Consideration also needs to be given to establishing a strategy/policy unit within the MoT.

7.1.4 Project Selection

Project identification under CARDS and IPA I has largely resulted from the priorities defined in the MIPDs for IPA funding based on the Copenhagen principles and on the NADs developed by the GoS based on a collaborative process with Ministries with accession the overarching theme. IFIs and bi-lateral donors, whilst developing their own country strategies, have nevertheless focused on Corridor X as the target for assistance as part of the overall TEN-T process of developing a strategic rail and road corridor. There is no doubt that the completion of this project will provide the backbone on which more transit traffic can be encouraged but just as importantly, more diverse development throughout the country can be stimulated. It is therefore essential that major obstacles causing delays are overcome quickly.

Completion of these projects, however, has highlighted critical problem areas that need to be resolved in future planning. These include the following:

- Expropriation of land, which has become an increasingly critical issue and imposed a huge financial strain on the GoS.
- Problems with minority groups, where resettlement has caused immense problems especially with respect to the Belgrade bypass and the Gazela Bridge. Failure to take adequate account of these issues has caused extensive delays.
- Difficulties with the issue of permits for land usage with Serbia ranking extremely low in the World Bank's Doing Business profiles of 185 economies.
- Disputes between contractors.
- Underpricing of projects in the initial bids and the weaknesses in using lowest bidders as the criterion for the selection of contractors.

There is also the issue of project viability and sustainability. Whilst funding from the IFIs (EBRD, EIB and World Bank) is based on sound, independent, cost benefit analysis often with the support of the WBIF, project appraisal skills domestically are weak and primarily technical in focus. Whilst the evaluators were able to examine the feasibility studies of key donor projects, this was not the case for bi-lateral donors.

Road projects on Corridor X rely very much on toll revenues to fund maintenance and operation, currently estimated at €160 million annually, but it is debatable whether these will be sufficient to cope with the anticipated increase in traffic once the route is fully operational and maintenance costs rise as a consequence.

Since the development of Corridor X also includes the promotion of railways and the shift of freight from road to rail, it is questionable whether attention has been paid to diversionary costs.

Clearly what is required for future programming, especially with the SWAp, is a prioritised pipeline of projects available for implementation, ranked on the basis of key criteria including readiness. For transport projects, this should take due account of all the issues discussed above and of their linkage effect to the promotion of the sector as a whole.

In this respect, Corridor X projects together with the proposed project for promoting intermodal transport need to be linked to the promotion of trade facilitation measures, especially customs procedures on borders, since this will have a major impact on operational efficiency. Investments in hard measures need to be complemented by soft measures as well if the anticipated benefits are to be realised. This

also needs to be linked to the Rule of Law with respect to the implementation and enforcement of legislation; and to support to the public administration in the development of an appropriate institutional framework.

With regard to the IWT, over €16 million was provided in the period 2007-2011 for the RIS, the removal of UXOs and the river training works. Whilst these are commendable and in line with priorities in the NAD and the overall EU policy of promoting sustainable transport development, the fundamental issue is whether funding is further justified given that traffic flows are so low and there will be a need for huge amounts of investment to promote the use of the Danube. Since the IFIs have shown little interest in this sector and port development is constrained by private ownership, the issue of whether this can still be perceived as a priority is debatable.

There is a need for the further development of criteria for project selection and the development of a rolling plan of projects geared to the SWAp. Critical to the selection will be project readiness, viability in economic and financial terms and potential short and long-term impact. Whilst much of this work is being carried out by external agencies at present, there is a need to reinforce the capacity of the institutions responsible for identifying and managing projects. Training in project preparation and evaluation is essential.

7.1.5 Financial Sustainability

The major proportion of funding to the transport sector is from the IFIs and bi-lateral donors with IPA providing support for supervisory work, documentation, legislation etc. The only major investment project from IPA is the supervision and construction of the Zezelj bridge at Novi Sad which is crucial to the promotion of the rail Corridor X, although there is an indication that the development of the intermodal terminal near Belgrade will involve an allocation of around €17 million from IPA in 2014.

The issue to address, however, is whether the large number of loans from IFIs and bi-lateral donors is financially sustainable at the global level. Presumably, the Public Debt Administration has some financial model in place that assesses debt repayment obligations over the medium and long–term horizons and this is updated regularly to take account of unforeseen delays. Tolls on the Corridor X will be vital to the maintenance of the motorway but also to the repayment of the loan and the interest due.

Given the enormous amount of funding required to modernise the transport sector, alternative financing models need to be explored including PPP and concession arrangements. There is also an urgent need to ensure that there is adequate maintenance provision for the specific projects and in the case of Corridor X, the level of tolls are adequate without being uncompetitive. A review of PPP legislation is also needed.

With respect to this point, alternative financing models need to be explored. Serbia has already moved towards using ***conditional loans*** and has projects in place with Azerbaijan. for Corridor XI (Route 4), the Peoples' Republic of China for the Zemun Bridge and with the Czech Government for the Nis-Dimitrovgrad rail link. These have the advantage in that they have a much simpler contracting process with contracts signed directly with contractors from the host country obviating the need for lengthy tendering procedures for works and supervision with the proviso that Serb contractors have 45% of the contract. In essence a single package is provided for finance and construction, which should speed up implementation significantly.

The downside to these types of arrangements, however, are that they tend to be more expensive in terms of interest rates charged compared with the IFIs as well as there being no competition in securing a contractor and no control over procurement procedures.

With respect to developing concession agreements and PPP, there have been problems in the past with some of these and their needs to be more clarity in the legal arrangements underpinning these complemented modification of these laws to provide a more secure environment for potential investors.

7.1.6 Monitoring

As part of the process for developing a SWAp, there will be a need for more rigorous monitoring and performance-based indicators, which will determine the continuation of funding and the release of tranches. One of the weaknesses identified in almost all the project fiches for the sample of projects included in the survey were the poor indicators in the Log Frame Matrices. Most were not SMART and had weak OVIs, which were difficult to measure. Most appeared to have been put together as an afterthought and there appeared to be little enthusiasm to use them as real measurements of performance. This is a critical area that needs to be addressed with sectoral indicators providing a baseline upon which to base performance. Section 6.4 attempts to provide such indicators assuming a SWAp.

More detailed training needs to be provided on Logical Framework Analysis and on the development of sound and realistic performance indicators. This is an urgent need since it will underpin the preparation of future Project Fiches. In view of the fact that there appears to be have been little in the way of modification of the LFA once the projects have been contracted, the need for the re-working of the log frame matrices needs to be reinforced.

Also with respect to monitoring, it is clear that the ISDACON information system needs to be upgraded to reflect the changing nature of assistance. In the light of the movement towards DIS and decentralisation of management, the availability of a user-friendly management information system that can provide real time access to information on project implementation will be vital.

Although there are plans to develop a more sophisticated information system, this should be treated as a matter of urgency and a more interactive and user-friendly management information system installed as soon as possible to support the introduction of the SWAp. Training in its use will also be essential for all relevant Ministries and agencies.

7.1.7 Modalities

Most projects were funded under service and supply contracts, the exception being the construction of the Zezelj bridge. The project for Harmonisation of the Acquis II utilised twinning as the modality, as did the previous harmonisation project. Whilst the first was with Austria and Germany and had certain fundamental weaknesses, the second was with France and Lithuania, although it involved Austrian, Slovenian and Finnish experts. There have been numerous twinning projects in Serbia and the Western Balkans funded by IPA, and DG Enlargement undertook an evaluation of the merits of both approaches in its study “Twinning versus Technical Assistance”, produced by Ecorys in January 2011.

Certainly the feedback given by the MoT was that the reason for the choice of twinning rather than TA was that their project was *acquis-related* in that it focused on the harmonisation of key legislation affecting the accession process and therefore required in depth knowledge from experts from established and new EU Member States. The choice of France with many years experience in managing twinning projects together with a new Member State that had gone through the process of harmonisation provided the appropriate blend and concurred with the objective of institution strengthening. The DG Enlargement report concluded that they had not found any significant differences in the performance of either twinning or TA projects and the crucial criteria for the choice of modality were the issues of institution strengthening and whether or not the project was acquis related.

Whilst some would argue that twinning is too invasive and that experts tend to work alongside the local side on a daily basis, others suggest that TA is by its very nature evasive and somewhat distant and detached from the real needs of the beneficiaries. Whichever modality is used, it really comes down to the quality of the staff employed and their ability to interact with local experts. In particular, the choice of Project Manager/Team Leader for TA contracts or Resident Twinning Adviser (RTA) for twinning is vital, as are the key experts. Interviews need to form an integral part of the evaluation process, especially on long-term contracts. In the case of the twinning project for the Harmonisation of the Acquis, the choice of Team Leader was fundamental to the success of the project since he interacted well with the staff of the Ministry and provided the dynamism to inspire staff.

In deciding whether to use a traditional TA or twinning contract, the rationale for the using the latter has been that embedding experts within the Ministries gives them access to their unique expertise based on their experiences in EU Member State Governments and that this should be the modality chosen if the project is specifically acquis-related. There have been good and bad experiences of both modalities in Serbia. Certainly the Harmonisation with the Transport Communautaire Phase II has had a very positive impact.

The critical issue to the success of the project, however, whether it be twinning or TA, is the quality and knowledge of the technical team and the commitment and expertise of the counterpart staff. It is essential therefore that experts are properly evaluated and interviews are an essential element in the selection process.

7.2 Project Specific Issues

7.2.1 Infrastructural projects

The project sample included major infrastructural works including the Zezelj bridge at Novi Sad funded by IPA for fabrication and supervision and with support from the Autonomous Province of Vojvodina and the City of Novi Sad; the Belgrade bypass funded by the EIB with supervision provided through IPA; the Sava Bridge funded by the EIB; and Corridor X funded by the EIB, EBRD, World Bank and the Hellenic Bank with supervision for 3 sections funded by IPA. The key findings and recommendations focus on the specific issues regarding these projects but also provide measures that need to be implemented at the sector level as a whole.

a) Technical Issues

The technical evaluation of projects would appear to be a cause for concern since the choice of lowest cost bidder can compromise the project and lead to protracted delays when the preferred bidder cannot meet their contractual requirements due to financial constraints. It would appear that this has been the case with the construction of Zezelj Bridge at Novi Sad and has led to extensive delays and contractual disputes. The situation is compounded by the large number of construction projects taking place in Serbia, which is straining the capacity of local companies who often deliberately underprice the bid to win contracts.

This raises the issue of the quality of the tendering process for large infrastructural projects and the capacity and expertise of the evaluation committees and their ability to select the most competitive bid. Problems with Evaluation Committees were at the root of the problems the EBRD faced with respect to the supply of rolling stock and EMUs with. The first loan for €100 million was signed in May 2009 with the tender period taking almost 3 years at a cost of almost €1.6 million in arrangement fees. Similar problems occurred with the second loan of €100 million.

Contractual difficulties have also been at the heart of many of the delays on infrastructural projects. Disputes amongst contractors are common and issues related to unforeseen circumstances often end in protracted disputes. On the Zezelj Bridge, delays have been attributable to the discovery of concrete blocks around the piers and an unexpected concrete chamber and leaking and incorrectly dimensioned pipes.

Problems have also arisen with respect to the **design aspects** and once again delays on the Zezelj Bridge project were linked to this. In the case of the Sava Bridge project, the eventual cost was three times the original budget and one would have to question the economic viability of this "landmark" 'project, which is auspicious in terms of design but has not to date generated the impact envisaged,

The resolution of these problems ultimately requires a number of measures including:

- Strengthening the quality, capacity and independence of tender evaluation committees
- Continuous support from independent consulting engineers in the tender evaluation process
- Strengthening the design capacity of local engineering/design companies
- Continuing support to supervision contracts
- Strengthened project monitoring and reinforcement of Steering Committees
- More rapid response to dispute resolution through established international mechanisms

With respect to specific problems identified in the sample survey, the key issues are as follows:

- Resolution of the contractual dispute for the construction of the **Zezelj Bridge at Novi Sad** with respect to unforeseen obstacles. This has caused considerable delays and disputes between the supervising engineer and the contractors.

One of the major causes of delays on all projects, however, is **land expropriation** which in many cases has not been completed by the time the project has been launched for tender or as is common, has not been completed despite the contractors being told otherwise. A major problem for the GoS, however, is providing the funding for the expropriation of land with inflated prices often being demanded especially in residential areas.

Whilst this problem has been widespread on many major infrastructural projects, urgent action is needed to resolve the problems with respect to the following:

- Second section Corridor X funded by the Hellenic Plan from Donji-Neradovac to Levosoje.
- Access roads to the Zezelj Bridge, where land permits have still not yet been awarded.

This ultimately comes down to the problems mentioned in the previous section with respect to project readiness and ultimately their needs to be a process of project selection in which key criteria such as land expropriation need to be validated. There is little point in tying up financing only to find that land disputes arise and the project cannot move forward.

The construction of the Sava Bridge access roads funded by the EIB as well as other major infrastructure projects (e.g. Gazela Bridge) have been seriously disrupted by **spontaneous settlements** at the sites by the Roma community. There has clearly been an oversight on the part of the authorities with respect to measures needed to resolve this problem and protracted delays have been the outcome.

Resolution of these types of problems depend very much on the recognition that problems will arise and that adequate measures need to be introduced to provide for resettlement programmes that meet the requirements of the communities in place. The issue of resettlement has been explicitly addressed by the World Bank for Corridor X through the preparation of a Resettlement Policy Framework, which was adopted by all partners and this should be used as a guideline for dealing with similar problems on other projects.

With respect to specific projects, the issue of the **Sava Bridge** appears to have been resolved after the impasse in 2012 but care needs to be taken to ensure that these difficulties do not escalate again and that resettlement policies following World Bank guidelines are applied universally where necessary.

Delays are also being encountered by the **absence of planning permission** and this is particularly the case with respect to the Intermodal Project where a public enquiry is still needed together with the approval of the Ministry of Construction and Urban Planning. Indeed Serbia ranks extremely low on the World Bank's Global Competitiveness index especially with respect to the issuing of permits.

Action needs to be taken to move this important project forward and the Public Enquiry needs to be launched and the considerable economic and environmental advantages of developing this facility explained. As far as we are aware, there are no issues with respect to land expropriation at this site due to the absence of residential areas.

There are also problems with the issuing of permits for the construction of the access roads to the Zezelj Bridge.

Clearly the process of issuing permits for construction, land acquisition etc needs to be streamlined.

b) Institutional issues

There is some concern over the separation of responsibilities amongst Ministries with the MoT in charge of the major infrastructural projects but the Ministry of Construction and Urban Planning now having overall responsibility for "Corridor XI". One would have to question the decision to separate responsibilities at a time when it would appear to be more appropriate to strengthen the capacity of the MoT.

It would also appear that relations between PE Roads of Serbia and Corridors of Serbia need to be strengthened and enhanced since the latter is responsible for development and construction supervision and the former for on-going management and maintenance. Links between them seem to be somewhat strained at present.

Strengthening capacity at PE Roads of Serbia is an integral part of the new World Bank programme and this is to be welcomed.

In terms of capacity building, there is certainly a case for strengthening the expertise especially in the areas of strategic planning and policy making, project formulation and monitoring and evaluation and in the areas of legal enforcement.

c) Financial and economic issues

Firstly, whilst the WBIF has been used to undertake feasibility studies and the IFIs have carried out their own internal economic and social cost benefit analyses, attention is drawn to the following projects where there are causes for concern:

- Zezelj Bridge where the feasibility study was carried out by CIP and where the traffic forecasts are deemed weak and over-optimistic. The use of an internal organisation rather than an independent consultancy to prepare the feasibility study was also questionable.
- Sava Bridge where the original feasibility study undertaken in 2005 yielded a NPV of €157m and an EIRR of 12.4% based on an investment cost of €127m. The actual investment figure was more than 3 times this figure amounting to €405 million.

This highlights critical weaknesses in the domestic capacity to undertake full feasibility studies leading to an excessive reliance on international agencies to do these studies.

There is also a distinct lack of expertise in major implementing agencies with respect to their ability to evaluate large-scale infrastructural projects.

There is a clear need to provide support for the development of skills in these areas with support from the international donors.

The second issue relates to **maintenance** of new infrastructure. Whilst the World Bank is developing a model to assist with this, huge increases in transit traffic on Corridor X once it is completed will substantially increase maintenance costs.

There is a clear need to build maintenance and operational costs into the funding of projects once donor assistance is ended and to make it obligatory for the GoS to provide for those costs as a pre-condition for project support.

In terms of specific projects this is relevant to the following:

- RIS where difficulties have been encountered with providing for operational costs with the system shut down whilst internet contracts are concluded.
- Corridor X where toll revenue may not be sufficient to cover maintenance costs. As the volume of transit traffic increases as the corridor is completed, the issue that will need to be resolved is whether the toll revenues will be sufficient to cover annual and recurrent maintenance costs and whether they can be raised to adequate levels without making the corridor uncompetitive with respect to other corridors in the region.

The third issue relates to the problems currently facing the EIB with respect to the project to construct the railway line from Stara Pazova-Novi Sad. The feasibility study for this project was undertaken by the EU under IPA 2008 and negotiations have become very advanced with the EIB with regard to financing. Concerns have recently been raised over the possibility of funding being provided by the Russian Federation. This raises an interesting dilemma as to whether the EU should be financing projects, which are eventually contracted to bi-lateral financing agencies and where the strict EU tendering and procurement rules might not apply.

The fourth issue relates to on-going financial support to projects once donor assistance is completed. This was highlighted in the evaluation with respect to the RIS project where the system was not operational due to lack of funds to operate the system and secure internet contracts. This is linked to the point made previously with respect to the Government's provision of adequate funding to maintain and sustain the projects,

The fifth issue relates to the costs incurred by protracted delays in project implementation. In the case of the EBRD project to provide Electrical Multiple Units and Rolling Stock to Serbian Railways, some €1.6 million was paid by the company to the EBRD in arrangement fees due to the failure to complete the tenders over a 3 year period from 2009-2011. Over €400,000 was also lost on delays in implementing the project to supply rolling stock with a second tranche of €100 million. This was money that Serbian Railways could ill-afford to lose.

Whilst the same financial arrangements are not in place for EIB loans, the logjam in delays for major infrastructural projects ties up valuable funds that could be used on other projects in the transport sector or elsewhere in Serbia.

Resolution of these types of issues once again relates to project readiness and the quality and timing of the tender evaluations.

7.2.2 Technical Assistance projects

a) Technical issues

As was mentioned above, the study concerned with the *Facilitation of Intermodal Transport in Serbia* funded at a cost of €2 million and completed in March 2012 is stalled at present due to the absence of planning permission. Whilst approved in principle by the State Revision Committee, the spatial plan for the area has still not yet been approved by the Ministry of Construction and Urban Planning and a Public Hearing is required.

It is important that this significant project does not languish on the shelves since it offers the potential for developing an environmentally-friendly, intermodal facility for freight transport that could potentially be replicated in other parts of Serbia and relieve congestion and improve transport safety.

b) Institutional Framework

Clearly, an area of considerable concern is the suspension of the IPA 2008 project *TA to Serbian Railways in restructuring in selected fields.* This restructuring with the separation of infrastructure and operational aspects is fundamental to harmonisation with the transport acquis and is critical to the development of a much more dynamic and efficient rail sector. Serbian Railways is considerably overstaffed, incurs huge annual operating deficits and oversees a rail network where average train speeds rarely exceed 30m/h.

Given the huge investments in the railways on Corridor X and the drive to establish an intermodal facility, the establishment of 4 operational companies and the restructuring of the railways is an urgent priority.

Considerable funding will also be needed to ensure that the restructuring process is undertaken swiftly and the various operational units have the required management and operational expertise.

With respect to capacity building, many of the projects funded included significant elements to train local staff through workshops, study tours, seminars etc. The current World Bank project also focuses on strengthening the capacity of the PE Roads of Serbia as well as the Road Safety Institute.

There is, however, a critical need to continue with this process especially in the light of the transition to DIS in the not too distant future. Expertise in strategic planning, project preparation, tendering and procurement needs to be reinforced and a comprehensive approach to human resource development geared to the needs of the accession process introduced quickly.

The successful project on the Harmonisation of the Acquis Phase II was instrumental in drafting major laws and bylaws affecting the transport sector but there is still a need to build on this and focus on enforcement capacity and regulatory issues. A wide range of laws has been placed on the statute books in all sectors but capacity for enforcement is lacking.

Further support to law enforcement and regulatory issues is required.

c) Economic and financial issues

There is a clear need to ensure that projects are not treated in isolation and that inter-sectoral linkages are reinforced. This will be on of the cornerstones of SWAp. In the case of the Intermodal project, the successful implementation of this project will depend very much on ensuring that trade facilitation measures are in place and that there is a harmonisation of customs and border crossing procedures with neighbouring countries. It will also require greater efficiency in the management of the rail links with the neighbouring countries to ensure service and delivery times.

A summary of Findings and recommendations is provided in the Table 7.1 below:

Table 7.1 Summary of Findings and Recommendations

	Findings	Recommendations	Responsibility	Deadline
Sectoral Issues				
Programming	2007-2011 Project focused with annual programming Commitment to Copenhagen criteria Diffuse strategies, priorities and procedures of donors	Movement to SWAp to create greater inter-ministerial coordination, focused strategic objectives, closer co-ordination with donors. Multi-annual planning to reduce time constraints. Need for much more strategic vision in programming. Need for much greater inter-Ministerial collaboration, Need for more specific, sector based indicators.	MoT, SEIO, EUD	Urgent
Collaboration	Development of Donor Coordination Groups and Sector Working Groups significantly improved inter-Ministerial and inter-agencty collaboration	Need for more effective coordination amongst donors and reinforcement of collaborative mechanisms especially amongst Ministries.	SEIO, MoT, IFIs, bilateral funders	Short term
Management	Movement to decentralised mangement (DIS) to provide for greater autonomy	Need to reinforce local structures especially IPA Units at key institutions.	EUD, MoT	Urgent
Project Selection	Lack of project readiness	Need to undertake much more detailed project appraisal based on project readiness.	SEIO, PPF facility, MoT	Short Term
	Inadequate appraisal of project impact at sectoral level	Link to introduction of SWAp with key criterion for project selection being sectoral impact.	SEIO, PPF facility, MoT	Short Term
	Absence of rolling plan of projects	Development of package of projects that meet key sectoral needs and prioritised on basis of kety criteria.	SEIO, PPF facility,MoT	Short Term
	Deficient economic and financial appraisal	Support to developing local appraisal capacity	MoT	Medium term
Financial Sustainability	Overdependence on traditional financing models.	Evaluation of alternative financing models including concessional and PPP arrangements; and conditional loans	MoT, SEIO	Medium term
		Assessment of legal frameworks	SEIO, MoF, MoT	Medium

		for alternative financing models and recommendations on amendments needed		term
Monitoring	Need to develop a new and integrated Management Information System for Project Monitoring/Evaluation	TA to upgrade INDASCON information system	SEIO	Urgent
		Reinforcement of Monitoring/Evaluation Capacity at MOT and key agencies	MoT	Urgent
		Development of sector-based indicators to provide baseline for future performance.	MoT/SEIO	Urgent
Project Issues				
Infrastructural projects				
b) Technical	Weak technical evaluation of projects	Strengthen technical capacity, quality and independence of evaluation committees.		Short term
	Contractual difficulties	Need to resolve current problem at Zezelj bridge with respect to disputes over unforeseen obstacles Continuing support for supervisory contracts by EU.		Urgent
	Design Problems	Strengthen design capacities at key institutions. Link to feasibility studies	CIP, Road and Rail Directorates	Medium Term
	Resettlement Problems	Adoption of World Bank Resettlement Policy Framework for future exisitng and future projects Focus on resolving issues at Sava Bridge and Belgrade bypass		Urgent
	Lack of Planning approval and problems with land expropriation	Resolve issues with respect to: a) Second Section of Corridor X funded by Hellenic Bank from Donji-Neradovac to Levosoje. b) Access roads to Zezelj Bridge Streamline approval procedures c) Corridor X projects	EIB, EBRD, World Bank,MoT	Urgent Urgent

b) Institutional	Dilution of Ministerial Responsibilities	Ensure synergy and complementarity in approach	MoT, Ministry of Construction and Urban Planning	Medium Term
	Strengthening technical and planning capacities	Provide training in project planning, strategic planning and CBA	MoT, SEIO	Medium Term
c) Financial/Economic				
	Weak Feasibility Studies (Zezelj Bridge, Sava Bridge)	Independent assessment of studies needed. Continuation of support from WBIF and PPF facilities.	IFIs, WBIF, PPF	Medium term Short Term
	Inadequate project appraisal expertise	Develop capacity in project appraisal/CBA in key institutions through seminars, in house training etc.	MoT, SEIO	Medium Term
	Problems with provision of maintenance and on-going operational support	Completion of World Bank Maintenance model and application to on-going and planned infrastructural projects. Continuous monitoring of financial provisions. Resolution of issues with respect to support to RIS. Establish maintenace provision and operational support as pre-condition for project funding.	World Bank, MoT MoF, MoT MoT, PLOVPUT,MoF	Short term Medium Term Urgent Short Term
	Project Financing Issues	Resolution of problem with respect to financing of Novi Sad-Stara Pasova railway. Establish protocol. Evaluation of alternative financing models (concessionary finance/PPP) and conditional loans.	MoF, MoT, SEIO SEIO/MoT/MoF	Short Term Short Term
Technical Assistance Projects				
a) Technical Issues				
b) Institutional Issues	Suspension of Project to restructure railways	Need to implement asap and to move forward with restructuring as key element in acquis accord. Support needed to strengthening new institutions in amanagement and technical areas.	MoT, JSC Serbian Railways	Urgent
	Weaknesses in	Increased staffing and	MoT	Medium

	intermodal capacity at MoT	development of capabilities to support intermodal project.		Term
c) Economic Issues	Need to develop inter-sectoral linkages	Intermodal project needs to be linked to measures to improve trade faciltation and harmonisation of customs laws in neighbouring countries.	MoT Customs Administration	Medium term

8. Policy Objectives for Future Assistance

On the basis of the analysis of the transport sector in Serbia, key weaknesses were identified that could form the basis of policy objectives for future assistance from the EU, IFIs and bi-lateral donors. These policies are largely a continuation of previous policies but respond to expected future developments in Serbia and lessons learned from the past. It is intended that the policies should address key areas of weakness that the Serbian Government is less able to address directly itself. They have been grouped into three key areas and are set out in the following paragraphs. They refer back to the identified weaknesses that are discussed in more detail in preceding paragraphs.

The three key areas are:

- Institutional strengthening
- legislative support
- continued development of infrastructure

8.1 Institutional Strengthening

Many areas were identified where institutional strengthening is required, several of which are overlapping. They include:

Strategic planning. There is a lack of strategic overview across all modes that would prioritise projects according to their contribution to a long-term coherent plan. There is a General Master Plan for Transport, but it requires regular updating, improved multi-modal capacity and an improved prioritisation mechanism.

Project preparation. While it is not necessarily appropriate for the institutions to be able to prepare project documents themselves (feasibility studies, design documents etc), they must have staff who are sufficiently trained to understand and interpret them. Any documents that are prepared by the institutions must maintain a certain minimum standard and adhere to international best practice.

Project monitoring. Current project monitoring is weak. A single tool is required to monitor projects across modes, which are updated on a regular basis, that incorporates all relevant information but which clearly presents the status of projects in an easily comprehendible form. Related to this, the logical framework matrices of projects should be prepared to a much higher standard, updated as required and include SMART indicators that are measurable.

Financial co-ordination. There is little evidence that financial sustainability is being monitored, with loan agreements being drawn up across numerous IFIs, bi-lateral donors and other bodies.

Institutional capacity. With the imminent introduction of a decentralised implementation system (DIS) for EU funded projects, a significant increase in sufficiently trained staff will be required in all agencies involved in the management of the transport sector.

Railway restructuring. This is a specific institutional need that is crucial to the future viability of the railways.

Customs reform. Reduction of transit time through border crossings is essential to trade facilitation. The introduction of a "single window" system and a change in concept of customs from a policing body to a facilitating body are necessary. This is particularly important for the development of intermodal facilities where close cooperation with neighbouring countries is vital.

8.2 Legislative Support

The two projects carried out by IPA in the period 2007-2011 were both successful in terms of harmonising the Serbian transport legislation with the EU transport acquis and in preparing Serbia for membership of the ECAA. The twinning project was particularly successful and drafted a wide range of Laws and bylaws across all transport modes and the use of the twinning modality proved extremely effective in this case. Whilst a number of Laws have been approved, other critical ones have not and there is, therefore, an urgency in getting these on to the statute books.

The critical issue, however, is not just the approval of the Laws but their enforcement across all transport sectors. This is particularly problematical with respect to the bylaws. There are serious weaknesses in the institutional framework for the administration and enforcement of these laws and this issue needs to be addressed as a matter of urgency. A number of regulatory bodies have been set up but others need to be established to create a series of independent regulatory agencies.

Whilst a Twinning Light project is being developed at present to provide an agency for accident investigation, further support is needed for enforcement-related issues.

Continued legislative support is required to ensure the alignment of laws and by-laws with the Acquis Communautaire while ensuring that the sector has the capacity to respond to the changes. Specific areas of support could include:

- the continuation of reforms
- the facilitation of the approval of laws
- law enforcement
- support in specific areas e.g. legislation to support and facilitate the development of PPP (public private partnerships) and market liberalisation.

There is also an urgent need to augment and reinforce the quantity and quality of legal experts capable of transposing the laws and bylaws and making them effective and enforceable.

Further training for all stakeholders in this area is vital, particularly as more laws move on to the statute books as compliance with transport acquis increases.

8.3 Continued Development of Infrastructure

Significant amounts of finance have already been invested in infrastructure, particularly in strategic projects such as Corridor X (Road and Rail).

Future policy should address the following:

- secondary networks that provide access to local markets and customers. This would be in line with the re-focusing of IFI assistance, especially the EIB and the World Bank, where the Corridor X Highway Project has a distinct focus on transport efficiency and road safety on three project sections. EBRD are also moving in this direction.
- maintenance of the new and upgraded infrastructure. This is a critical area and one that has distinct financial implications if the quality of service is to be maintained once donor assistance disappears. Whilst the WB is developing a maintenance model, future policies need to include

this very important element to prevent deterioration of the infrastructure as traffic levels increase.

- continued attention to transport safety. The establishment of the Road Safety Agency is a very important step in addressing the high accident rates that particularly affect the road sector. The focus on safety needs to be addressed in the overall design of infrastructure.

Quite apart from the re-focusing of work towards secondary roads as the key road transport corridors are completed, the emphasis should be placed on the enormous demands of improving the quality of the railways to improve speeds, to attract passenger and freight traffic and thereby improving the quality and efficiency of the service. A core element in this will be the restructuring programme and the promotion of private sector involvement in the operation of the railways.

The development of intermodal transport will also be a high priority and steps need to be taken to move the project proposed for the outskirts of Belgrade forward. This will be an important initiative, have significant environmental and safety aspects but also will act as a catalyst to the growth of the area around the terminal.

For IWT, further assistance is needed to improve navigation on the Danube in the removal of UXOs, river training works and the removal of the sunken vessels from World War II. These will be core elements in improving navigation. The key issue, however, is addressing the factors that impede the development of the waterways as strategic transport arteries and this will require extensive amounts of financing which is not as yet forthcoming from the IFIs due to low traffic volumes, lack of infrastructure and the failure to develop a cohesive strategy with neighbouring countries that would make the IWT competitive.

9. Measurable Indicators

Problems were identified in most of the Project Fiches with the specific indicators presented in the Log Frame Matrices. Very few were appropriate or SMART and therefore did not provide the appropriate tool for measuring project performance. It was also apparent that the indicators and the Log Frame Matrices, in many of the sample projects had not been adjusted to reflect changes that had taken place between the time that the Project Fiche had been prepared and the actual signature and launching of the specific project.

In order to be SMART, the indicators must be:

Specific - clear and unambiguous

Measurable - how much or how many, yes or no?

Available - in existing documents or with little expenditure

Relevant - to the objectives

Time bound - the baseline and target values must apply to a specific year or other appropriate time period.

In terms of developing appropriate indicators, there needs to be a clear statement of the purpose and objective(s) of the programme/project, the measurement being applied, the baseline upon which to base performance and the proposed targets over a specific timeline, in this case 2014-2020. Realistic targets need to be set and there must be a range of verification sources, which can be used to measure compliance.

If the aim is to move to more performance based funding, as is the case with traditional budget support programmes, then these will determine the degree of future funding and act as an incentive for compliance by the specific implementing agency.

The overall objective specifies a wider goal to which the project or programme contributes. The specific objective identifies exactly what the project is designed to achieve, while the results detail the individual components of the project or programme.

In general, it is appropriate to provide a single indicator for the overall objective and a single indicator for the specific objective. Several indicators may be appropriate for the project results. For each indicator, the following should be specified:

- the baseline value and the baseline date
- the current value and the current date
- the target value(s) and the target date(s)
- the source of the information i.e. from where it is to obtained and who is responsible for collecting it and analysing its impact.

Key issues include the following:

- the targets need to be realistic and achievable
- the baseline data needs to be correct
- the verification sources need to be sound
- regular monitoring is required to verify sustainability, linked into a new or upgraded monitoring system
- future funding should be conditional on compliance with measurements and achievement of targets.

Some examples of appropriate indicators for different types of project are set out below.

Indicators for road construction or rehabilitation could follow the example of the World Bank indicators used for Corridor X, presented previously in Table 5.4, adjusted according to the specifics of a particular project.

For rail construction or rehabilitation projects, the overall objective might be defined as an increase in rail modal share of passengers or freight. An appropriate indicator would be the percentage of passengers travelling by rail on the total rail network. The specific objective might be the rehabilitation of 50kms of railway and the indicator would be the number of kilometres rehabilitated. The results could be:

- improved rail speed, measured by the average speed of trains on the rehabilitated section, starting from a baseline of 60km/h in 2013 and increasing to, say, 100km/h over 5 years.
- improved efficiency, measured by the percent of trains on the section arriving within 5 minutes of the scheduled time

Verification would be based upon reports from JSC Serbian Railways and other relevant sources. If necessary, specific site surveys may be required to collect the data. Someone needs to be responsible for checking this data and it must be on a regular basis to ensure consistency. For intermodal projects, efficiency and performance could be the handling capacity at intermodal terminal(s) measured in TEUs with an extremely low base rate at present due the poor performance of ZIT and could be used to set specific targets linked to the feasibility study that has been prepared.

For improving navigation on the Danube, this could be measured by the number of days navigation has been possible throughout the year with the target rates increased as the RIS comes into action and the impact of the training works and removal of UXOs kicks in. This could also be linked to the number of accidents on the river caused by poor navigation. The Danube Commission would be one source of verification in conjunction with the reports and statistics from PLOVPUT. If one wanted to measure the

performance of the river as a transport artery, then the measurement would be the volume of traffic on an annual basis with the figure of 8 million tonnes as the baseline, assuming that is correct and verified.

If the objective is to improve the administrative and institutional capacity of agencies involved in managing transport projects, the measurement would be the number of people trained in the relevant institutions set against baseline numbers at present, with optimum targets spread over the specific period in question. In this case, however, it is not just the quantity of persons trained but also their quality and capacity which raises the issue of ongoing HRD development for staff.

Finally, as another example, policies to improve legislation could be measured by the number of Laws and Bylaws approved in the transport sector with the baseline set by the LAP and the conclusions of the work carried out under the Harmonisation of the Acquis Phase II project. If enforcement is to be built into this, then indicators should relate to the issues such as the number of road traffic accidents, with targets set for their reduction.

The key to making these indicators work is to establish the appropriate measurement mechanisms, with indicators clearly identified and baseline data set at the appropriate level and agreed with the relevant institutions. Targets need to be measurable and achievable in the context of the resource (technical, financial and administratively available).

Table 9.1 below provides indicators linked to the specific priorities outlined in the previous sub-section on *Policy Objectives for Future Assistance.*

Table 9.1: Measurable Indicators, Transport Sector, SERBIA

Key Policy Objective	Priority	Indicators	Source of Verification	Responsible Institution	Baseline	Target						
					2013	2014	2015	2016	2017	2018	2019	2020
A. Institutional Strengthening of Core Transport Institutions												
	Strengthening institutional structures and capacity at key administrations.	Restructuring plans in place and staffing levels strengthened in qualitative and quantitative terms.	HRD Reports Staff Appraisal	MoT, SEIO, JSC Serbian Railways, PE Roads of Serbia etc.	6 members of staff, 5 with 10 years experience at Sector for European Integration at MoT.							
	Delivery of range of training courses linked to the acquis including strategic planning/policy, CBA, Monitoring etc.	Number of training courses delivered and people trained.	Reports on Training Needs Assessment (TNA), training programmes and evaluation reports.	MoT								
B. Legislative Support in enforcement of												

transport acquis												
	Drafting of Laws and bylaws	No. of Primary Laws drafted and adoptedin line with transport acquis	Official Gazette	MoT								
		No. of bylaws drafted andadopted	Official Gazette	MoT								
	Establishment of regulatory bodies	No. of Regulatory bodies established and operational	Official Gazette	MoT	Road Safety Council CAD							
	Training of legal specialists for enforcement	No. of legal new experts trained in enforcement issues	HRD Reports	Various Agencies								
3. Infrastructural Development												
Road Sector	Upgrading of Road transport network	Kms of motorways and primary roads constructed	Reports of PE Serbia and Corridors of Serbia Reports of World Bank, EIB and EBRD Bilateral donor reports	MoT Corridors of Serbia, PE Serbia								
Rail Sector	Reorganisation of	Official	Company reports.	MoT								

	Railways	Establishment of companies and staffing provided.	Gazette	Serbian Railways								
	Increase in modal share of railways	Percentage change in passengers using railways. Percentage change in freight usage.	JSC Serbian Railways Annual Report	JSC Serbian Railways(New company)	59%							
	Upgrading of rail infrastructure	Kms of railways constructed and operational to EU standards	JSC Serbian Railways Annual Report	JSC Serbian Railways (new company)								
	Train speed	Average train speed (kms/hr)	JSC Serbian Railways Annual Report		60km/hr					100km/hr		
Inland Waterways	Improvement in river traffic	Volume of freight traffic on Serbian stretch of Danube Tonnes)	Statistical Year Book	PLOVPUT MoT	8 million tonnes (2000)							
	Improvement in Navigational Safety	No. of days, safe navigation possible.	Danube Commission Plovput Annual Report	Plovput MoT	No. of accidents in 2013.							
Development of intermodal facilities	Establishment and operation of modern intermodal	Tonnage of freight using intermodal facilities (TEU)	Kombiterminal Statistics.	MoT Customs Admin.	Small percentage at ZIT in							

	facilities		Annual reports Customs Data		Belgrade, Port of Belgrade and Prahovo							
	Harmonisation of trade facilitation measures/customs procedures	Transit times at key border crossings	Time Release Studies Annual Customs Reports	Customs Administration								

ANNEXES

Annex 1: Evaluation Questions

Criteria and Indicators	Eval. Questions in ToR
a) Relevance	
What have been the overall funding and focus of EU funding and other donor support to the transport sector in Serbia and specifically for the period 2007-2011?	**A.1**
Judgement Criterion: Scale and focus of assistance to sector	**A.1**
Indicator: Funding and target of ODA disaggregated by donor and sector	**A.1**
Indicator: Comparative funding in previous funding periods by each donor agency.	**A.1**
Sources of verification: Time-series data on EU assistance to the transport sector in Serbia (CARDS, IPA) and donor funding –IFIs (EBRD, EIB, World Bank) and bilateral funding and specifically for the period (2007-2011). Strategic documents (NPI, MIP, donor reports.)	
To what extent were the projects selected by the EU and other donors relevant and aligned with the overall strategic goals of the EU accession process, and EU Transport Policy?	**C.1**
Judgement Criterion: Alignment with accession priorities	**C.1**
Indicator: Degree of project alignment with specified EU transport priorities and policies	**C.1**
Sources of Verification: Key documents from the European Commission especially the *White Paper on Transport-Roadmap to a Single European Transport Area; Stabilisation and Association Agreement; National Programme for the Integration with the European Union (NPI); Multi-Annual Indicative Planning Documents (MIPDs); CARDS and IPA* programming documents. Interviews with GoS officials (SEIO, MoT, Ministry of Construction etc.), EUD and donor agencies; WBIF.	
To what extent were the priorities and needs of Serbia translated into the programming of assistance for the transport sector as identified in the NPI?	**A.2**
Judgement Criterion: Alignment of programming assistance with NPI priorities	**A.2**
Indicator: Degree of alignment of assistance with NPI	**A.2**
Sources of Verification: Key documents including the NPI, General Master Plan for Serbia (GMPT), Strategy of the Railway, Road, Inland Waterway, Air and Intermodal Transport development in the Republic of Serbia (2008-15), MIPDs, donor programme documents.	
To what extent was support provided by the EU coherent and complementary to the national budget and other donors?	**A.11**
Judgement Criterion: Complementarity of EU assistance	**A.11**
Indicator: Degree of synergy with National budget and other donor assistance	**A.11**
Sources of Verification: Comparison of EU with donor assistance and National Budget priorities. EU Programming documents, NPI, donor assistance programmes.	

Criteria and Indicators	Eval. Questions in ToR
Was the mix of assistance to each transport mode (road, rail, IWT, air, intermodal, horizontal) balanced and geared to strategic priorities?	**C.2**
Judgement Criterion: Modal choice	**C.2**
Indicator: Allocation of funding amongst respective transport modes (Road, rail, IWT, air, multi-modal and horizontal) in relation to strategic priorities.	**C.2**
Sources of Verification: Data on budget allocations to each transport mode by EU, donors and national budget and analyses of focus and target beneficiaries.	
Has Serbia established medium-term achievable goals (laws, regulations, institutions, etc.) related to alignment with the transport acquis?	**C.8**
Judgement Criterion: Degree of compliance with the transport acquis	**C.8**
Indicator: Assessment of time-frame and goals for implementation of laws and establishment of regulatory bodies and institutional structures to achieve compliance with transport acquis.	**C.8**
Sources of Verification: Documents relating to the implementation of the transport acquis in Serbia, the time-frame and levels of compliance. Interviews with MoT, EUD etc.	
To what extent have issues related to the removal of physical and no-physical barriers been addressed and incorporated into policy directives and complementary transport programmes?	**C.5**
Judgement Criterion: Integration of trade facilitation measures	**C.5**
Indicator: Assessment of measures e.g. modernisation of customs facilities, integrated border management, harmonisation of transit regimes, logistics/transport services.	**C.5**
Indicator: Harmonisation of trade and transport facilitation measures.	**C.5**
Sources of Verification: Strategic policy documents, reports on customs modernisation and reform, documents relating to harmonisation of transit regimes within the region etc.	
To what extent has regional cooperation been addressed in transport policies and programmes?	**C.6**
Judgement Criterion: Regional cooperation on transport policy	**C.6**
Indicator: Extent of inter-Ministerial dialogue	**C.6**
Indicator: Documents showing levels of cross border cooperation and participation in regional projects in the transport sector.	**C.6**
Sources of Verification: Documents from TEN-T, SEETO, DG MOVE DG Regional Policy; policy proposals on regional cooperation in transport sector.	
b) Efficiency	

Criteria and Indicators	Eval. Questions in ToR
To what extent were the donor's chosen implementation modalities efficient?	**A.9**
Judgement Criterion: Efficiency of implementation mechanisms	**A.9**
Indicator: Degree to which alternative mechanisms (technical assistance and/or twinning) achieved the desired results	**A.9**
Sources of Verification: Interviews with beneficiaries and donor agencies. Project fiches.	
How well were the selected contracts linked to other contracts and whether other contracts could deliver better results?	**A.10**
Judgement Criterion: Contractual compatibility and synergy	**A.10**
Indicator: Assessment of contractual framework	**A.10**
Sources of Verification: Contracts provided by donor agencies and GoS.	
Was donor assistance aligned and complementary with each other?	
Judgement Criterion: Alignment and complementarity of donor instruments.	
Indicator: Compatibility in funding mechanisms and project management	
Sources of Verification: MIPDs, transport sector Fiches, donor programme documents.	
To what extent did the benefits accruing to the project justify the costs?	**A.17**
Judgement Criterion: Comparison of costs and benefits	**A.17**
Indicator: Qualitative assessment of costs (direct and external) and benefits based on programme indicators.	**A.17**
Sources of Verification: Project Fiches, feasibility studies, interviews with beneficiaries.	
c) Effectiveness	
To what extent has financial assistance been effective in achieving sector results?	**A.3**
Judgement Criterion: Realisation of planned benefits/improvements to the sector	**A.3**
Indicator: Quantitative and qualitative assessment by the use of relative programme indicators	**A.3**
Sources of Verification: Programme indicators	
Was the balance of responsibilities amongst the various stakeholders correct and adequate?	
Judgement Criterion: Ownership of objectives and achievements	

Criteria and Indicators	Eval. Questions in ToR
Indicator: Degree of stakeholders' involvement in project selection, design, implementation and monitoring.	
Where cross-cutting issues (regional and local development, gender, environment, minorities, good governance) adequately built into the projects and programmes?	**Item 2.5 in TOR**
Judgement Criterion: Inclusion of cross-cutting issues	**Item 2.5 in TOR**
Indicator: Assessment of scope and targeted beneficiaries	**Item 2.5 in TOR**
Sources of Verification: Project Fiches, programming documents, monitoring reports. Interviews with Ministries of Regional Development, Environment, donor agencies	
d) Impact	
Were the immediate and intermediate results delivered translated into the desired and expected impacts?	**A.4**
Judgement Criterion: Overall impact of the project	**A.4**
Indicator: Achievement of specified targets according to programme indicators	**A.4**
Sources of Verification: Project Fiches, monitoring reports, interviews with beneficiaries.	
To what extent did the assistance impact on the overall strategic goals of the sector?	**C.9**
Judgement Criterion: Contribution to overall strategic goals for the sector	**C.9**
Indicator: Assessment of positive and negative results compared to the strategic goals.	**C.9**
Sources of Verification: Strategic documents (NIPs, MIPDs, GMPT).	
To what extent did the projects' contribute to the achievement of the strategic objectives and priorities linked to reconstruction and reconciliation?	**A.4**
Judgement Criterion: Contribution to reconstruction and reconciliation process	**A.4**
Indicator: Appraisal of specific measures to enhance reconstruction/reconciliation and their impact.	**A.4**
Sources of Verification: Policy and programme documents relating to goals reconciliation/reconstruction process. Papers on impact and achievement of goals.	
Where there additional negative or positive impacts?	**A.6**
Judgement Criterion: Unforeseen impacts	**A.6**
Indicator: Assessment of additional positive and negative impacts	**A.6**

Criteria and Indicators	Eval. Questions in ToR
Sources of Verification: Project monitoring reports, interviews. Project documents.	
Were there elements which could hamper the impact/sustainability of assistance and if so, what measures could be taken to mitigate their effects?	**A.8**
Judgement Criterion: Negative elements impacting on sustainability	**A.8**
Indicator: Assessment of extent and potential ramifications	**A.8**
Indicator: Measures to mitigate adverse impacts	**A.8**
Sources of Verification: Project monitoring reports. Interviews with MoT, SEIO and management teams.	
Were the indicators suitable, appropriate and S.M.A.R.T.?	
Judgement Criterion: Degree of alignment with overarching strategies and policy priorities	**A.13**
Indicator: Suitability and appropriateness to desired results and objectives i.e. Specific, Measurable, Available, Relevant, Time-bound and Independent (S.M.A.R.T.)	**A.13**
Indicator: Whether indicators were actually measured?	**A.13**
Sources of verification: Project Fiches, proposals by MoT and SEIO for new indicators. Interviews.	
Have the EU and donor assistance programmes achieved maximum visibility both nationally and internationally in terms of disseminating strategic objectives and results of the programmes and projects?	**A.16**
Judgement Criterion: Effectiveness of visibility of donor programmes	**A.16**
Indicator: Level of knowledge of range of donor programmes and expected impact in Serbia and the region.	**A.16**
Sources of Verification: Reports on visibility for all donor programmes. Examples of media campaigns. Interviews with key institutions (SEIO) and possibly with focus groups.	
To what extent has IPA and donor assistance impacted on transport safety and accessibility?	**C.4**
Judgement Criterion: Integration of safety and accessibility into donor assistance	**C.4**
Indicator: Assessment of measures to improve transport safety and accessibility and their impact	**C.4**
Sources of Verification: Statistical data on accidents prior to and post programme intervention. Reports on policies and programmes to enhance transport safety and improve accessibility. Interviews with Road Safety and accessibility organisations and MOT.	
e) Sustainability	

Criteria and Indicators	Eval. Questions in ToR
Was adequate attention paid to the development of an appropriate and effective administrative and institutional framework to ensure sustainability?	**A.5/A.15**
Judgement Criterion: Institutional and administrative capacity	**A.5/A.15**
Indicator: Quality and adequacy of measures to ensure on-going support for project implementation.	**A.5/A.15**
Sources of Verification: Reports on organisational/management structures and staffing levels. Proposals for future staff development to support project implementation.	
Were adequate measures introduced to ensure the financial sustainability of the projects and the programmes in general?	**A.5/A.7**
Judgement Criterion: Financial sustainability	**A.5/A.7**
Indicator: Level and adequacy of funding from donors and Government for investment and recurrent costs.	**A.5/A.7**
Indicator: Capacity for loan repayment at project and macro level	**A.5/A.7**
Sources of Verification: Feasibility studies/EIA on key projects funded by EU, IFIs and bilateral donors. Interviews with EU, IFIs and bilateral donors and with key institutions in GoS (MoT, Ministry of Construction, Ministry of Finance, Ministry of Economy etc.) Documents on loan agreements. Macro-economic data.	
Has sustainable capacity been created in the beneficiary institutions to manage policy changes and future assistance?	**A.14**
Judgement Criterion: Decision/policy -making capacity	**A.14**
Indicator: Assessment of management/strategic skills at major implanting agencies	**A.14**
Indicator: Adequacy of Human Resource Development (HRD) at senior/middle management levels	**A.14**
Sources of Verification: Data on expertise and experience of policy/decision makers in key GoS institutions related to transport policy. Documents on HRD provision internally and externally. Interviews with key decision makers.	
Has institution building in the transport sector ensured that institutions have adequate capacity to implement the acquis communautaire and has it assisted in developing regulatory bodies for the transport sector?	**C.3**
Judgement Criteria: Expertise in EU law and regulatory issues	**C.3**
Indicator: Levels of expertise on the transport acquis and regulatory issues	**C.3**
Indicator: Assessment of capacity for enforcement	**C.3**
Sources of Verification: Data on quantity, expertise and experience of legal/regulatory staff in GoS institutions and regulatory bodies. Documents on mandate and performance of existing regulatory institutions and reports on future proposals. Interviews with key regulatory bodies.	

Criteria and Indicators	Eval. Questions in ToR
Have appropriate steps been taken by the EU and donors to ensure that Serbia has developed the appropriate level of technical/managerial capacity for project identification, evaluation, implementation and monitoring?	**C.7**
Judgement Criterion: Project management skills	**C.7**
Indicator: Levels of expertise in major implementing agencies	**C.7**
Indicator: Quality of training provision (internal and external)	**C.7**
Sources of Verification: Data on quantity, experience and expertise of project management staff in key institutions (MoT, Ministry of Construction etc); analyses of training provision within institutions and externally in Serbia. Interviews with key project management staff and training institutes and with WBIF.	

Annex 2: List of Meetings

Ministry/Agency	Name	Position	Address	Tel. No	e-mail
European Delegation	Konstantiinos Soupilas	Programme and Coordination Manager	Vladimira Popovica 40	381 11 3083 219	konstantinos.soupilas@eeas.europa.eu
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European Delegation	Gligo Vukovic	Project Manager-Operations		381 11 3083 256	gligo.vukovic@eeas.europa.eu
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	Tatjana Dzuverovic	Advisor to the Group			
	Jasmina Simic	Advisor to the Group			
SEIO	Petar Spasic	Head of Group for Planning and Coordination	Nemajina 34 Belgrade		pspasic@seio.gov.rs
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SEIO	Dejan Gojkovic	Head of Unit for Monitoring, Evaluation and Reporting		381 11 3061 110	dgojkovic@seio.gov.rs
EIB	Andreas Beikos	Head of Office	Vladimira Popovica 40 11070 New Belgrade	381 11 3121 756	a.beikos@eib.org
EBRD	Ian Brown	Senior Advisor	GTC Building	381 11 2120 711	browni@ebrd.com
EBRD	Mirjana Milovanovic	Associate Banker	Bulevar Dr. Zorana Djindica 64a, Belgrade		milovanm@ebrd.com
SIDA	Iain Mackie	SIDA Evaluation Project, TL & KE1	Maxima Consulting		
	Bernard O'Sullivan	SIDA Evaluation Project, KE2	Belgrade	381 61 654 72 85	Bernard@maximaconsulting.rs

World Bank	Svetlana Vukanovic	Transport Specialist	Bul. k. Aleksandra 86 11000, Belgrade	381 11 3023 723	svukanovic@worldbank.org
PLOVPUT	Ljubisa Mihajlovic	Director, Directorate of Inland Waterways	Francuska 9 1000 Belgrade	381 11 3029 801	ljmihajlovic@plovput.gov.rs
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PPF5	Zilinas Pajarskas	Project Analyst		382 11 3067 646	z.pajarskas@takas.lt
MoT	Miodrag Poledica	State Secretary	Nemanjina 22-26 Belgrade	381 11 3616 613	poledica@ms.gov.rs
Mine Action Centre	Milan Sapic	Deputy Director	Vojvode Toze 31	381 11 3045 280	czrs@eunet.rs
Mine Action Centre	Sladana Kosutic	International Coop. Adviser	11050 Belgrade	381 11 3045 281	czrs@eunet.rs
Embassy of Spain	Dejan Zlatkovic	Counsellor, Econimic affairs	Vojvode Supljica 40 1118 Belgrade		dzlatkovic@commercio.mityc.es
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Embassy of Greece	Georgios Chatzipetros	First Secretary	Strahinjica Baba 76	381 11 3231 577	ecocom-belgrade@mfa.gr
Embassy of Greece	Sophia Tsamicha	Minister for Economic and Commercial Affairs	Belgrade	381 11 3231 577	ecocom-belgrade@mfa.gr
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Roads of Serbia	Maja Pekevska			381 11 3034 937	maja.pekevska@putevi-srbije.rs

Annex 3: List of Documents Received

Strategic Documents

Needs of the Republic of Serbia for International Assistance, 2009-2011, Sept.2009

The National Plan of the Republic of Serbia for road and railroad infrastructure development in the period from 2008 to 2012

Draft Operational Programme for Economic Development 2012-2013, Instrument for Pre-Accession Assistance Component III, September 2011

Draft Final Report, Evaluation of the Effectiveness and Efficiency of development assistance to the Republic of Serbia per sector, SIDA, April 2013

EU Delegation, Instrument for Pre-accession assistance (IPA). Multi-Annual Indicative Planning Document 2009-2011

EU Delegation, Instrument for Pre-accession assistance (IPA)

Multi-Annual Indicative Planning Document 2011-2013

GoS, Finance Manual: Borrowing Conditions-IFI and Bilateral Donors

GoS, National Programme for Integration with the European Union, October 2008

GoS, Strategy of Railway, Road, Inland Waterway, Air and Intermodal Transport Development in the Republic of Serbia, 2008-2015

GoS, SWOT Analysis of Railway, Road, Inland Waterway, Air and IntermodalTransport in the Republic of Serbia.

Italferr, General Master Plan for Transport in Serbia. October 2009

Western Balkan Investment Framework http://www.wbif-ipf.eu

Aviation

Project Fiche, Assistance for the purpose of full Application and Implementation of the Multilateral Agreement on Establishment of a European Common Aviation Area (ECAA Agreement), The Civil Aviation Directorate of the Republic of Serbia, 29 March 2007

Terms of Reference, European Common Aviation Area (ECAA) agreement implementation support project for the Republic of Serbia, LFV, May 2008

Draft Final Report, European Common Aviation Area (ECAA) agreement implementation support project for the Republic of Serbia, LFV, May 2011

Inception Report, European Common Aviation Area (ECAA) agreement implementation support project for the Republic of Serbia, LFV, May 2009

Horizontal Projects

Final Report, Evaluation Twinning versus Technical Assistance, Ecorys, 2011

Final Report, Twinning Project, Harmonization with the Transport Acqus Communautaire Phase II

Interim Quarterly Reports, Twinning Project, Harmonization with the Transport Acqus Communautaire Phase II

Slide Show, Twinning project, SR 08 IB TR 01, HARMONIZATION WITH THE TRANSPORT ACQUIS, PHASE II, CLOSING EVENT, 22. February 2013

Intermodal

Final Report, Facilitating Intermodal Transport in Serbia, Egis International, March 2012

Project Fiche, Facilitating Intermodal Transport in Serbia

Terms of Reference, Facilitating Intermodal Transport in Serbia

Monitoring Report, EC, August 2011

Inland Waterways

Implementation of River Information Services (RIS) on the Danube River of Serbia. Final Report. April 2013. Selex ES.

Project Fiche, Danube River Information System. EUD.

Project Fiche, Removal of Unexploded Ordnances (UXO) from the Danube River. EUD.

Services for the Supervision of Survey and Removal of Unexploded Ordnances (UXO) from the Danube River

Location – Prahovo Section, Serbia, Final Report. April 2013. Mull and Partner.

Survey and Removal of UXO from the Danube River,

Prahovo Section, Final Report. March 2013. Sea Terra.

Terms of Reference, Removal of Unexploded ordnances (UXO) from the Danube River

Works Tender Dossier, Volumes 1 to 5, Survey and Removal of Unexploded ordnances (UXO) from the Danube River, 2010

Bos Vitteveen, Master Plan and Feasibility Study: Inland Waterway Transports for Serbia, June 2006 GMPTS Final Technical Reports

Roads

WBIF: Corridor X: Serbia http://www.wbif-ipf.eu/index.php?page_id=377&id=112

WBIF: Belgrade Bypass http://www.wbif-ipf.eu/index.php?page_id=377&id=11

Project Fiche, Supervision of Belgrade City Road By-Pass, Section B -Dobanovci to Bubanj Potok

Project Fiche, TA to support implementation of infrastructure projects in the Republic of Serbia - PIUs

Project Fiche, Supervision of road construction works on the Corridor X

ToR, Supervision of Construction Works on Belgrade By-pass, section B5 “Orlovaca – Avalski Put”

ToR, Fourth Project Implementation Unit (PIU) in the Public Enterprise “Roads of Serbia”

ToR, Supervision of Construction Works of Corridor X, E80 Motorway - Section from Ciflik to Pirot

ToR, Supervision of Construction Works of Corridor X, E75 Motorway – Tunnels Predejane and Manajle, Serbia

ToR, Supervision of Construction Works of Corridor X, E75 Motorway – Roads, bridges and interchanges from Grdelica to Vladicin Han, Serbia

EPTISA in association with Safège and IRD, Supervision of Construction Works on Belgrade By-Pass, Section A, Batajnica - Dobanovci, Final Report, 2012

EGIS International, Supervision of Construction Works on Belgrade By-pass, section B5, Orlovaca - Avalski Put, Monthly Report November 2012 and Final Report, 2012/2013

Hill International, Project Implementation Unit (PIU) to Roads of Serbia, Draft Inception Report 2010, Completion Report 2011

Railways

WBIF: Technical Assistance for Railway Rehabilitation II http://www.wbif-ipf.eu/index.php?page_id=377&id=109

WBIF: Railway Reconstruction. Nis-FYR Macedonia (Corridor X) http://www.wbif-ipf.eu/index.php?page_id=377&id=37

Project fiche, Track Condition Survey System

ToR, Track Condition Survey System

Monthly progress reports, January 2013, February 2013, March 2013, System for the analysis of track conditions

ROM Report, System for the analysis of track condition

Task A Final Report, System for the analysis of track conditions, 2012

Task B Final Report, System for the analysis of track conditions, 2013

Project fiche, Žeželj Bridge - Rebuilding Serbian infrastructure

ToR, Supervision Of The Design & Build Reconstruction Works Of Zezelj Bridge In Novi Sad

DB and EGIS International, Supervision of the Design-Build Works of Zezelj Bridge in Novi Sad, Monthly Progress Reports January 2013, February 2013, March 2013

Construction of the Žeželj Bridge across the Danube in Novi Sad, Monthly Reports February 2013 and March 2013