



QUICK APPRAISAL REPORT

AMPLIACIÓN PUERTO DE TAZACORTE. PLAN DE PUERTOS 2ª FASE

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Prepared for

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1 INTRODUCTION

1.1 Project Appraisal Fundamentals

This Quick Appraisal (QA) is prepared in accordance with the "QA Check List" for major transport investment projects agreed with the EC – Directorate General Regional Policy Financial Greffe REGIO.

The objective of this QA is to support a constructive dialogue between the EU and the Applicant and Beneficiary providing recommendations and suggestions, based on an in depth analysis of the application form, annexed documentation and additional public available information.

The structure of this report is in line with the sections and headings of the Quick Appraisal Check List and the investment application form.

Along with the description of the findings of the analysis in each Chapter or Section of Chapter in relation to which: a) the quality of the information provided and available is not satisfactory, or b) the quality of the project is deemed to be improved, or c) the methodological and technical solutions adopted to undertake the CBA analysis, demand studies and project design are deemed as not adequate or reliable, the comments are highlighted in a recommendations and suggestions box.

In the key findings and concluding remarks Chapter we summarize the main considerations of our appraisal, commenting on the essential elements of the project, and suggesting any potential solution that can improve its quality according to the findings of the analysis as appropriate. The concluding section highlights any important issue that should be considered before the Commission can approve the project.

1.1.1 Applicant and project managing authority

The Applicant is the *Subdireccióon General de Administración del FEDER* responsible for implementing the *Programa Operativo de Canarias 2007-2013*.

The Beneficiary of the project is the Consejeria de Economia y Hacienda (DG Planificación y Presupuesto).

1.1.2 Documentation available

The application documents made available in electronic format through the CIRCABC system of the European Commission include the following:

- Application Form;
- CBA Report;
- EIA compliance declaration and environmental impact assessment related documentation;
- Gantt chart;

In terms of formal documentation, the project dossier is almost complete and complying with the EC Regulations, and the information provided is consistent with Art. 40 of Reg.1083/2006, Annex XXI and Commission Regulation 1828/2006. Despite this, application dossier is missing the non-technical summary of the Environmental Impact Study and the Natura 2000 certificate provided in Appendix 1 to the application form is either missing or not properly filled in and duly signed and dated.



2 PROJECT STRATEGY, CONCEPT AND OBJECTIVES

2.1 Project strategy

The major project under appraisal is included in the list of investments to be realized under the current *Programa Operativo de Canarias 2007-2013* – Priority Axis VIII – *Reducción de costes adicionales que dificultan el desarrollo de regiones ultraperiféricas. Gastos de inversión.* The project is expected to contribute to the realization of the priority objective of this axis – *desarrollar las infraestructuras necesarias para paliar los efectos de la ultraperificidad* – and of its intermediate objectives, particularly the O.I.2.1. one – *Mejorar la capacidad, conectividad y calidad de los servicios e infraestructuras interterritoriales del Archipiélago a través del Eje Transinsular de infraestructuras para el Transporte Canario reduciendo los costes de la doble insularidad.*

From the description of the objectives of the EJE~8 of the Programa~Operativo~de~Canarias~2007-2013 – Pages 161 to 167 of the PO FEDER 1 – it is clear that the scope of the axis is funding infrastructure related to transport and telecommunication; this is either emphasized by the 4 categories of expenditures identified (Airports – 29, Ports – 30, Regional/Local Roads – 23, and Telecommunication – 10) as well as by the specification that the application for funding under this axis excludes the possibility to apply for funding under the priority axis IV of the same programme, this last one specifically dedicated to energy and transport infrastructure.

These specifications are quite relevant for the purposes of this appraisal as the Port of Tazacorte has been and still is the subject of numerous intertwined investments related to its development, among which the most relevant ones are:

- The major project under appraisal, relating to the second phase of the expansion of the Port of Tazacorte, the investments mostly concerning the demolition and construction of dikes and terminal platforms. The works were contracted late September 2008 to the consortia UTE Dragados SA, Flota Proyectos Singulares, SA (FPS), y Transformaciones y Servicios, SA (TRAYSESA), for a total value of € 53,785,942.35²;
- A 30 years concession agreement granted mid of September 2008 to the *Satocan Group* for the use and operation of the areas at the Port of Tazacorte before and after the completion of the works related to the second phase of its expansion, the scope of the concession also including investment in 1) all facilities and infrastructure related to the leisure and sport yachting at the two *marinas* planned to be developed at the Port of Tazacorte; 2) as well as the buildings and facilities for the construction and management of a commercial/shopping related activities including boat and ship fuelling and fishery and aquaculture industries − 1² fase acondicionamiento de la dársena interior y explanada comercial del Puerto de Tazacorte" y, "2² fase de acondicionamiento de la dársena exterior del Puerto de Tazacorte"³. For the first phase of operation of the marina at the darsena interior (See Figure 9 below), the commercial centre/activities and the facilities and equipment related to fishery and aquaculture, the Satocan Group offered a yearly concession fee of € 320,600. The fee is expected to increased up to € 604,600 after the expansion of the Port of Tazacorte and completion of the marina at the darsena exterior (See Figure 9);
- Complementary works to the expansion of the Port of Tazacorte and related to water canalization (*Emisario Submarino y Terrestre del Puerto de Tazacorte*); these works were contracted to the *Satocan Group*, for a total value of € 8,739,906.76⁴.

¹ http://www2.gobiernodecanarias.org/hacienda/beha/modules/sumarios/portadas_publicaciones/424_publicacion.pdf

² http://www.boe.es/diario_boe/txt.php?id=BOE-B-2008-279062

³ http://www.gobiernodecanarias.org/boc/2008/207/008.html

⁴ http://www.gobcan.es/noticias/index.jsp?module=1&page=nota.htm&id=65353



Road access link to the Port of Tazacorte; the works were contracted in 2011 to the consortia *UTE: Comsa, S.A. - Satocan, S.A. - Ruiz Romero Firmes y Construcciones, S.L. (UTE: Acceso Puerto de Tazacorte)*, for a total value of 15.723.155,05⁵;

It is worth noting that according to our analysis the four different procurement processes have a different scope and although intertwined, the works under the different projects are not overlapping. Specifically concerning the strategic objectives of the project, it is worth noting that the application dossier – including the CBA – correctly limits its scope to the port infrastructure expansion works (namely the demolition and construction of the dikes and the platforms as detailed at Pages 4 to 7 of the application form) their costs quantified at page 2 of the CBA report. This is in line with the requirements of the European Commission market related policies that no investments infrastructure related to the operation of the terminals and other port activities can be considered eligible.

Although this is a positive aspect of the development strategy of the project under appraisal, the assessment of the application dossier and other public available information actually reveals that the proposed solution is over-dimensioned for the traffic of RO-RO freight and passenger's ferry services, which based on the statements of the EJE 8 of the *Programa Operativo de Canarias 2007-2013* should represent the ultimate strategic and functional scope of the investments. Actually the proposed solution seems much more oriented at supporting the development of the two marinas and other touristic related commercial activities rather than at improving accessibility to La Palma and its Western coast. As further discussed in the following pages, this interpretation seems also to be in line with relevant documentation annexed to the PEOL 2008 – *Plan especial de ordenación del litoral del Puerto de Tazacorte (PEOL-3) – Anejos Documento de Tramitación (Aprobación Inicial)* – Pages 107-132⁶.

The following table summarizes the assumptions of the application form concerning the functional and appraisal units of analysis, which in any case are deemed correct.

Table 1 Units เ	ınder the fu	ınctional a	nd/or analy	sis stand	point

Engineering works	Expansion works of the Port of Tazacorte
Procurement and contracting	Expansion works of the Port of Tazacorte
Development consent and environmental certifications	Expansion works of the Port of Tazacorte (also including the ones related to the operation of the two marinas and the commercial and industrial activities at the Port of Tazacorte, as well as the ones regarding the complementary works for the water canalization)
Infrastructure management	Port of Tazacorte
Economic and financial analysis	Expansion works of the Port of Tazacorte

2.2 Project description and functional objectives of the project

Although the project is expected to support the development of tourism, fishery and ferry services related operations at the Port of Tazacorte, in line with the objectives of the EJE 8 of the *Programa Operativo de Canarias 2007-2013* the main functional scope of the major project under appraisal should be supporting the development of RO-RO freight and passengers' ferry services by providing the Port of Tazacorte with an effective ferry terminal infrastructure. This is also in line with the goals of the *Red Transcanaria de Transportes* development plan, summarized at Figures 1 and 2 below.

⁵ http://www.boe.es/diario_boe/txt.php?id=BOE-B-2011-17465

⁶ http://www.tazacorte.es/ayto/documentos/PEOL/Anejos_Memoria_21%20noviembre%202008_.pdf



Figure 1 Trancanaria Routes Development Plan – Canary Islands

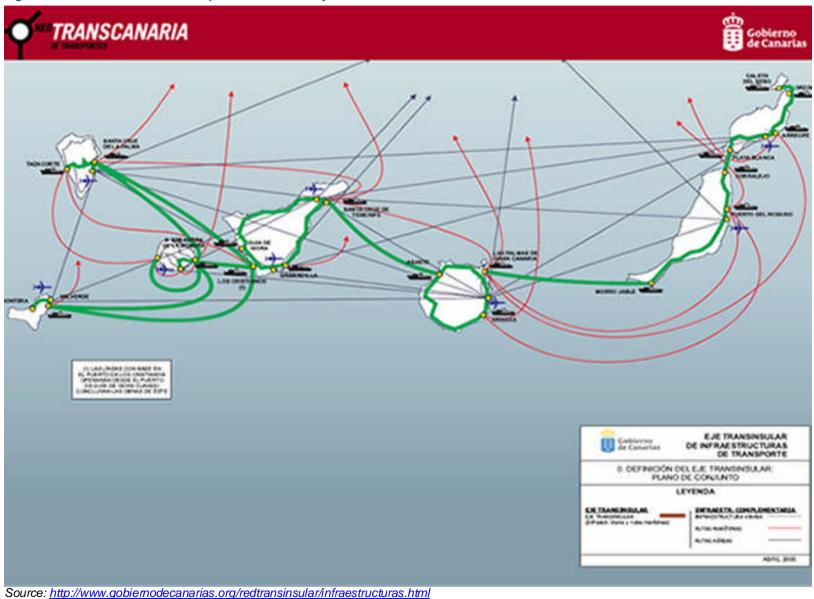




Figure 2 Trancanaria Routes Development Plan – La Palma INFRAESTRUCTURA VIARIA ESE DORSAL: S/C LA PALMA-LA CUMBRE EJE DORSAL: LA CUMERE-LOS LLANGS CINCUNVALACIÓN A LOS LLANOS ACCESO AL AEROPUERTO OVENTO VÍA EXTERSOR DE S/C DE LA PALMA. ACCESO AL PUERTO DE TAZACORTE PUERTO DE S/C DE LA PALMA PLIERTO DE TAZACORTE DAN ANDVECTO AEROPUERTOS AEROPUERTO DE LA PALMA OTRAS ACTUACIONES INTERCAMBIADOR DE SIC DE LA PALMA C. A. L. DE S/C DE LA PALMA PENTAGOROU ESTACIÓN DE LOS LLANOS DESITINGS PARADA PREF. DE TAZACONTE EXTERIORE S A LOS PUERTOS DE SAN SEBASTIAN Y LOS CRES MANOS CO SANTA CRUZ DE LA PALMA PUERTOLOG TAZACO IN) LAS LINEAS CONTRESTINO AL PLERTO DE LOS CHISTIANOS OPERARAN DESSE SL PLERTO DE SULPA DE SORALIVA VIZ CONCLUMALLAS CERAS DE ESTE. **EROPUERTO** E Fueblo EJE TRANSINSULAR Ortagosi DE INFRAESTRUCTURAS DE TRANSFORTE DESTINOS EXTERIORES 2. SSTADO DE LAS ACTUACIONES PREVISTAS EN EL EJE LA PALMA LEYENDA SCHWITTS COURS HARRAND, DE As Service A LOS RODEOS, GANDO, fo fixantin Anytholic previous TENERIFE SUR, EL HIERRO Y LANZAROTE Name partie folia markina da ca Et Projects En Prenitación SHIPMETTI CTUM CONFLIMENTMA 20% Congrismments MICTO DE CHERTONO Same Supplied Sections

Source: http://www.gobiemodecanarias.org/redtransinsular/infraestructuras.html



Regarding this objective, it is worth noting that the works part of the investment under analysis are referred to as the second phase of the development of the Port of Tazacorte. This port was indeed already expanded beginning of the last decade – the works realized between 1999 and 2002 – referred to as the first phase of its expansion (See Figure 4 and 5 overleaf). Figures from 3 to 7 illustrate the evolution of the Port of Tazacorte from the 1990's up to 2011.

From the pictures it can be noted that the first RO-RO freight and passengers' terminal was constructed early beginning of the last decade (2000's), following a bid process started in 1999, the works contracted to the consortia *UTE Traysesa – Dragados – Construcciones Darias*, and completed in 2002 (According to public available information, these works were also co-financed by the previous ERDF programme⁷).

The analysis of the pictures and maps in the Figures seems confirming that:

- The works are overall at an advanced stage of development (60% according to public available information⁸);
- The development of the marina located at the *darsena interior* is proceeding in line with the design illustrated in the map enclosed to the application dossier (Figure 9);
- On the contrary the layout of the port for the marina to be developed at the darsena exterior seems slightly differ from the layout proposed in the map enclosed to the application dossier (Figure 9);
- By overlapping Figures 8 and 9 See Figure 8 we may come to the conclusion that the proposed works under appraisal are actually not increasing significantly the capacity of the ferry related infrastructure; the difference between the two layouts probably limited to the increase in the length of the dock on the external dike and two mooring surfaces rather than one;
- Although the length of the ferry dock is significantly increased, overall the proposed technical solution seems actually more oriented at supporting the development of touristic commercial/shopping and yachting related activities and operations, rather than improving accessibility to La Palma via RO-RO freight and passengers' ferry services.

Our analysis leads to the conclusion that the expansion of the tourism commercial and yachting related activities and operations at the Port of Tazacorte actually seem representing the main scope of the infrastructure development at this port, which is not in line with the objectives of the EJE 8 of the *Programa Operativo de Canarias 2007-2013*.

⁷ http://emendezalvarez.blogspot.nl/2005/06/el-volcan-de-tauce-en-el-puerto-de.html

⁸ http://eldia.es/2011-12-15/PALMA/3-Recortan-millones-metros-dique-comercial-obra-puerto.htm



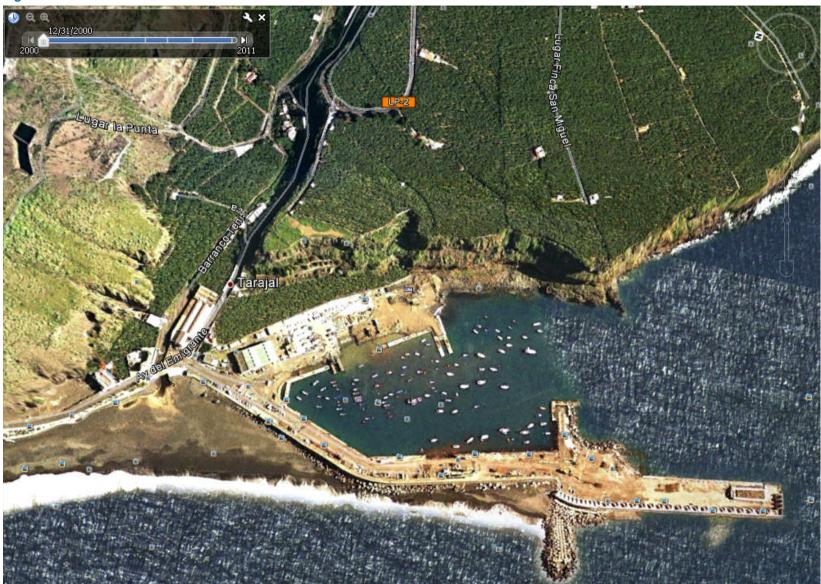
Figure 3 Port of Tazacorte - 1990



Source: http://blog.seniorennet.be/puerto_de_tazacorte/archief.php?ID=1055882



Figure 4 Port of Tazacorte - 2000



Source: Google Earth 2012



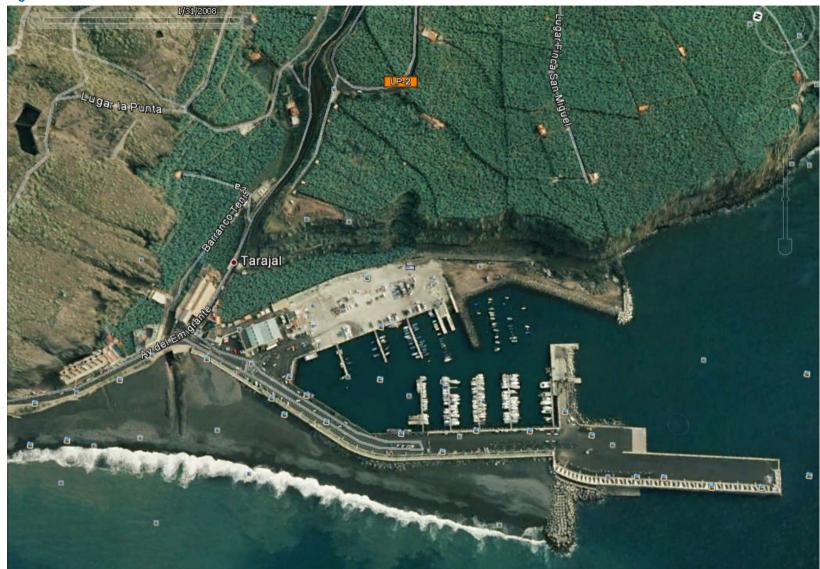
Figure 5 Port of Tazacorte - 2006



Source: Google Earth 2012



Figure 6 Port of Tazacorte - 2008



Source: Project Dossier – CBA Report



Figure 7 Port of Tazacorte - 2009



Source: Project Dossier - CBA Report



Figure 8 Port of Tazacorte - 2011



Source: Project Dossier – CBA Report



Source: http://www.gobiernodecanarias.org/redtransinsular/palma.html

Figure 9 Port of Tazacorte – Project Layout illustrating the works under assessment LIE ENCALDADOR NUEVAZONA DE TRANSBORDOS SHOUL BE HOHIGH DOME SHIMERGOO



Figure 10 Port of Tazacorte – Overlapping of Figures 5 and 7

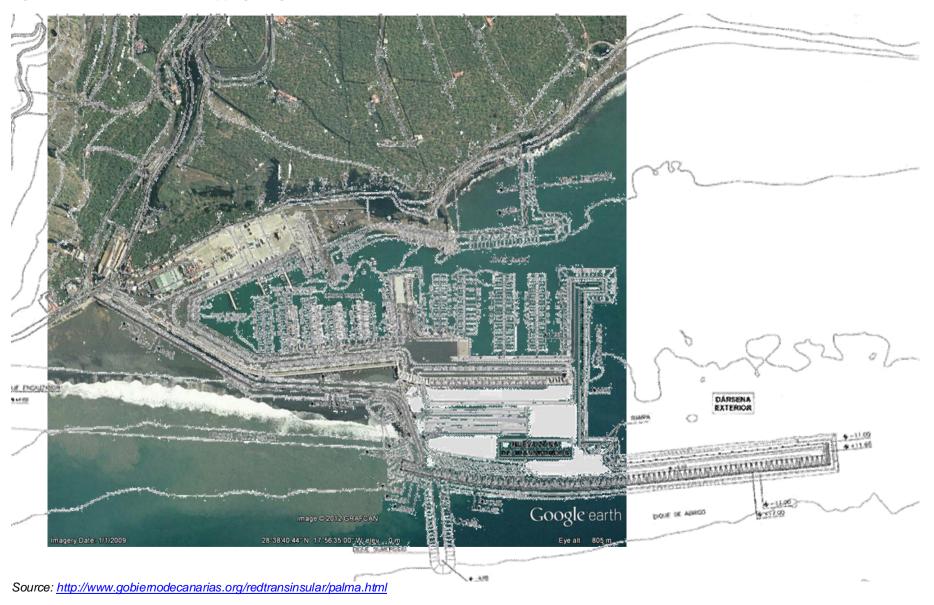




Figure 11 and 12 overleaf show the proposed expansion works as identified in the above mentioned PEOL 2008 – Plan especial de ordenación del litoral del Puerto de Tazacorte (PEOL-3) – Anejos Documento de Tramitación (Aprobación Inicial) – Pages 107-132.

Although we are not sure about any subsequent amendment to this plan, it is confirmed from the analysis of this document that a functional operational problem at the Port of Tazacorte existed following the completion of the works realized under the first phase of its development between 1999 and 2002, also affecting ferry services. One of the operational problems could have been the length of the ferry dock which is shorter compared to the one of other ports in the Canary Islands, about 100 meters shorter for instance than the one at the Port of Valle Gran Rey − See Figure 13 − which is very similar to the one of Tazacorte and is also located in a Western Coast of a Canary Island (much exposed to worse sea conditions than the eastern coasts), where actually ferry services are currently operating. Another operational problem could have been the presence of rocks in the basin port water area, which were removed by means of an additional contract granted to the consortia *UTE: Grupo Dragados, S.A.-Construcciones Darias, S.L. y Transformaciones y Servicios, S.L.* in 2004, for a total value of € 2,625,552.429)

At the same time the same PEOL 2008 report also recognizes that the ferry companies were not completely interested in operating at Tazacorte (the document also states that fishery activities were also declining at this Port). It is worth noting to this respect that the commercial terminal at Tazacorte was used by very few ferries up to date. According to public information the *Navaria* Armas is the only ferry company having operated at the Port of Tazacorte; a weekly service between Lanzarote and Santa Cruz de La Palma in 2005, also calling at Tazacorte, was the first ferry operation at this port, after more than 2 years following completion of the first phase expansion works in 2002. Actually it is not clear whether the *Vulcan de Tauce* ferry of the Armas company interrupted its services in winter 2006 due to bad sea conditions not allowing manoeuvring and mooring related activities at this port or due to commercial strategies (or even both). In practice the port seem to have remained unused for one additional year; the subsequent and last ferry services operated at Tazacrote probably being the ones during the 2007 summer season, when a ferry operated by Armas called at Tazacorte on the route Santa Cruz de Tenerife – El Hierro – La Palma¹⁰.

Actually, based on the above considerations and on the information commented in Section 3.3 below, the fact that the major project under appraisal does not increase the capacity of this port for ferry services is also in our opinion appropriate as the port is merely expected to serve interisland traffic. As also commented in the application form and in line with the *Red Transcanaria Development Plan* (Figures 1 and 2 above) – the RO-RO freight and passengers services expected to operate at Tazacorte are indeed probably limited to those already existing and interconnecting the island of La Palma and its main Port of Santa Cruz de La Palma to the islands of Lanzarote, El Hierro and La Gomera).

The application dossier is actually very poor concerning the description of the evolution of the port infrastructure and of the ferry operations at the Port of Tazacorte and the rationale at the basis of the identification of the proposed design is completely omitted. In our opinion the public available information seem confirming that the extension of the dock as illustrated in the PEOL 2008 would have been sufficient to the scope of the EJE 8 of the *Programa Operativo de Canarias 2007-2013* and the development of the *Red Transcanaria de Transporte*.

⁹ http://www.gobcan.es/boc/2004/009/007.html

¹⁰ http://emendezalvarez.blogspot.nl/2005/06/el-volcan-de-tauce-en-el-puerto-de.html; http://www.eldia.es/2006-02-22/palma/palma1.htm; http://delamarylosbarcos.wordpress.com/tag/naviera-armas/

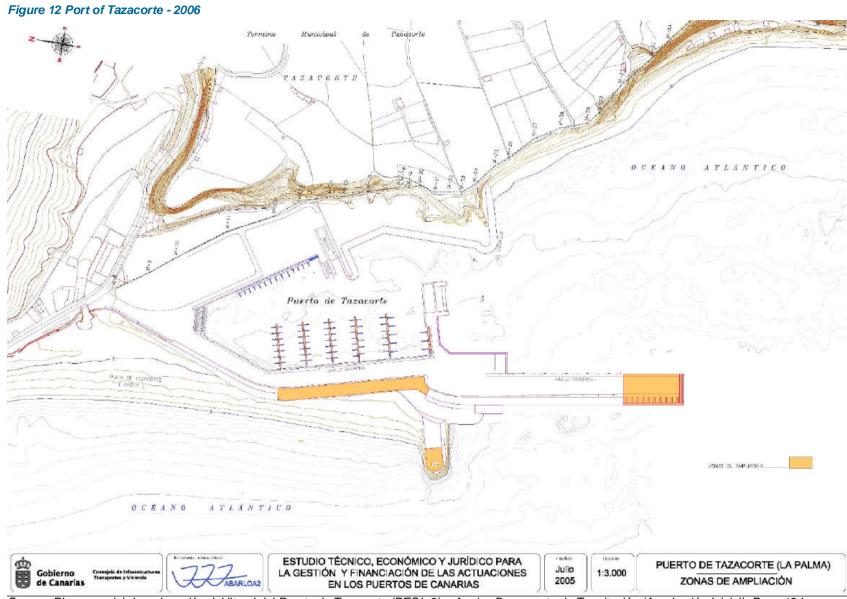


Figure 11 Port of Tazacorte – In between 2000 and 2006



Source: Plan Puertos de Canarias





Source: Plan especial de ordenación del litoral del Puerto de Tazacorte (PEOL-3) – Anejos Documento de Tramitación (Aprobación Inicial)- Page 124



Figure 13 Port of Valle Gran Rey - 2006



Source: Google Earth 2012



Under the functional stand point it is indeed relevant noting that whilst it remains doubtful that the solution under assessment (Figure 9) will allow the operation of ferry services in very bad sea conditions (the alternative in such situations will probably remain Santa Cruz de La Palma), the extension of the ferry dock by about 90-100 meters as described in the PEOL 2008 from the original 160 meters to about 250 meters would have been sufficient under the functional operational stand point to improve the operational layout of the port (the ferry dock at Valle Gran Rey is about 250-260 meters long).

According to public available information – to be confirmed ¹¹ – the fact that due to the current economic crisis, the Spanish Authorities together with the contractor for the works under appraisal and the concessionary company for the operation of the marinas (Satocan) seem intentioned to reduce the scope of their contracts, would confirm the results of our analysis and our interpretation of the situation as commented in the previous paragraphs. The length of the external dike where the ferry dock is located (around 482 meters according to the application form and the enclosed map in Figure 9) is possibly to be reduced between 100 and 150 meters (with a potential reduction of the ferry dock area to a length very similar to the one already planned in the referred PEOL 2008 – around 250 meters if not slightly lower), whereas the development of the marina at the *darsena exterior* would proposed to be postponed at 2016.

Specifically regarding the works under appraisal the reduction in scope of the project would in principle imply the reduction of the project budget of about \in 8 million, from \in 53.7 to \in 46 million, whereas the non development of the marina at the *darsena exterior* would probably not justify the increase in the concession fee (this has of course an impact on the results of the CBA as this last one assumes the concession fee will be \in 604,600 and not \in 320,000).

Under the technical functional stand point, it is sure that proposed layout and solution increase the water area of the port basin which is beneficial to all type of operations including the ferry ones; however, as also commented in the mentioned PEOL 2008, this may actually have been more beneficial to yachting rather than to ferry boats; and in any case as also stated in Chapter 3 below, the rationale at the basis of the proposed layout is not satisfactory with no reference to the benefits under the technical functional stand point for ferry services.

2.3 Consistency with other Union Policies

The financing sources for the project are presented at page 45 of the application form. The total costs amount to € 53,785,942 VAT excluded. This will be financed by the ERDF (€ 26,892,971) and by national funds (€26,892,971). No other financing sources are mentioned.

The major project under appraisal is complementary to another investment relating to the development of the Port of Tazacorte, also co-financed by the ERDF in the previous programming period 2000-2006, for a total amount of € 10,233,878.30 (probably phase 1).

As stated in the application form – Page 42 – the Port of Tazacorte is located in an area subject to the provisions of the Directive 2000/60/CE; according to this, the environmental impact preventive and monitoring programme and plan to be developed in progress with the implementation of the major project related works, include activities related to the monitoring of the water and sediments in the project area. These activities are expected to be in line with the provision of the *Programa de Recomendaciones para Obras Marítimas ROM 5.1 "Calidad de las Aguas Litorales en Áreas Portuarias*, published by *Puerto del Estado*.

The nature of publicity measures described at page 47 of the application form is in line with the requirements of the EU regulation. The cost for these measures was not quantified.

¹¹ http://eldia.es/2011-12-15/PALMA/3-Recortan-millones-metros-dique-comercial-obra-puerto.htm



B.2. Recommendations and suggestions

Based on the analysis of the application dossier and other public available information, it may be concluded that the major project under appraisal does not effectively contribute to the realization of the objective under the Priority Axis VIII of the *Programa Operativo de Canarias 2007-2013*. Although the investment is implemented conjointly with other relevant complementary works having a positive impact on the environment (i.e. *Emisario Submarino y Terrestre del Puerto de Tazacorte*), and specified that the proposed works overall support the development of all the different activities at the Port with multifaceted possible benefits, the proposed design and the main facts on the evolution of the project reveals that the main objective of the expansion are aimed at increasing the yachting activities by developing the marinas and the related commercial activities. Again, whilst this is not in line with the objectives of the EJE 8 of the PO FEDER Canarias 2007-2013, the improvement of the infrastructure for the operation of RO-RO freight and passengers' ferry services is minimal. It is worth adding that these improvements could have been done by mean of minor expenditures and less environmental impacts.

Contrary to what stated in the application form – Page 9 –, the Port of Tazacorte is not included in any TEN-T transport network.



3 TECHNICAL FEASIBILITY, PROJECT COSTS AND DEMAND ANALYSIS

3.1 Technical Feasibility

3.1.1 Feasibility studies

According to Table D.1. of the application form, the feasibility studies and CBA were undertaken between the 10th and 30th of January 2007. The application dossier omits providing any information on the process leading to the decision for expanding the port and particularly the reasons and criteria adopted for the identification of the proposed technical solution and layout.

The analysis of the demand is commented in section 3.3 below whereas the appropriateness of the identification of the scenarios used for the CBA is commented in Chapter 4.

3.1.2 Technical and operational concept

Despite the concern on the strategic and functional operational merit of the project as discussed in Section 2.2 above, the project description provided in the application dossier, although minimal, is overall acceptable to assess the project is technically viable. Considering the type of operations planned at the Port of Tazacorte and the expected traffic, we do not see technical operational problems due to the proposed infrastructure and layout. The construction techniques, materials and technical solutions are also in line with the current port infrastructure construction practices and are acceptable.

As already stated in Section 2.2 above, based on our assessment of the project dossier and additional public available documentation it is our understanding that the works and infrastructure part of this major project do not regard facilities related to the operation of the terminal and other economic activities at the port. The works mostly regards the demolition and reconstruction of the dikes and the terminal platforms. Particularly concerning the external dike works, which are the most relevant ones for the RO-RO freight and passengers' ferry operations, the dike developed under the previous first phase was overall 770 meters long with a ferry dock of about 160 meters. According to the proposed design (Figure 9) the new external dike will be 1257 meters in its entire length, the last section (4ª alineación) planned to be 482 meters with a ferry dock of more than 350 meters.

Of course, as already mentioned in Section 2.2 above, the planned increase by about 200 is in principle beneficial to the operation of ferry services, as well as the increase in the water area of the port basing represents a relevant improvement for all operations at the port including the ferry related ones.

However it is worth noting that the expansion at the port will meaningfully and mostly provide relevant spaces for the development of commercial related activities i.e. commercial shopping centres, restaurants and more specifically of two large marinas. According to public available information, the yacht and boat slots originally planned to be developed by Satocan at the marina located at the *darsena interior* should have been 240, to be increased up to 715 after completion of the marina at the *darsena exterior*. The recent news on the possible reduction of the scope of the Satocan concession and of the works related to the expansion of the Port of Tazacorte, referred to in Section 2.2 above, actually mention the slots may already be 700. In any case the original design was aimed at developing 63,908 m2 of land areas dedicated to fishery but mostly leisure commercial and yachting sport related activities and 53,896 m2 of water areas to be dedicated to yachting. Whilst this information should be overall updated, the project main facts confirm that the development is mostly related to touristic activities rather than to accessibility. It is hardly possible the slot figures in the Satocan concession could have reached without an increase in the water area of the port basin (See Figures 11 and 12).



3.1.3 Environmental Impact Assessment

Environmental Impact Assessment The project belongs to the categories included in Annex I of the EIA Directive. The development consent was given by the competent national authorities on the 05th May 2007. The project was subsequently modified to incorporate the environmental impact prevention, mitigation and compensation measures related to the works of the complementary project to the expansion of the Port of Tazacorte and regarding water canalization (*Emisario Submarino y Terrestre del Puerto de Tazacorte* - See also Section 2.1 above). This lead to the inclusion in the project scope and design of a submerged dike of about 90 meters (also represented in Figure 9), identified as a preventive and compensation measure of the environmental impacts of the two projects on the existing beach in proximity to the port and generated by the watercourses *Barrancos de Las Angustias* and *Tanisca*.

The application dossier includes several documentation and information concerning the Environmental Impact Assessment procedure and related consultation processes and results; however it is missing the non-technical summary of the EIS. The application dossier refers the development of the project is subordinated and conditioned by the adoption of mitigation, preventive and compensation measures identified in the EIS, DIA, DIE.

Specific measures were also put in place as reported at Page 41 of the application form relating to the monitoring of the impact of the construction activities on the environment and more specifically on the behaviour of bird and marine species as well as on the quality of the water and sediments, also in line with the Directive 2000/60/CE. As part of these proposed measures the application dossier also mentions the implementation and maintaining of a permanent monitoring report both aimed at reporting on the implementation of the measures and on new possible risks. The cost for these measures is estimated to be equal to the 2.31% of the total project cost.

Natura 2000 The project directly lies on a marine Natura 2000 site – *LIC ES7020122 Franja Marina de Fuencaliente* (albeit this is only affected by 0.1%) – and is also located close (about 700 meters) to the Natura 2000 site – *LIC ES7020021, Barranco de las Angustias*. According to the application dossier the effects and impacts on these sites were assessed as part of the above mentioned Environmental Impact Assessment and are expected to be minimal. The Natura 2000 certificate is however not properly filled in, duly signed and dated.

Strategic Impact Assessment The project was declared of public interest in summer 2006, after the transposition of Directive 2001/42/EC into national law, which occurred in 2006 by means of Law n. 9 of 28th of April. However we understand it was originally included in the *Plan de Puertos*, which was published before the transposition of the SIA Directive.

3.1.4 Project time schedule and implementation scheme

The proposed time-schedule for the completion of the construction works is acceptable. Also, as referred to in Section 2.2 above, according to public available information, the project is already at an advanced stage of implementation, with about 60% of the works already completed.

As also already mentioned in the previous paragraphs, according to the same information source, there seem to be the possibility that the investments at the Port of Tazacorte are not going to be implemented in the scope originally included in the contract for the works part of the major project under assessment and in the concession agreement for the operation of the marinas by Satocan (See again Section 2.2 on this). This has a threefold implication for the application under assessment:

The first one relates to the assumptions adopted for the CBA and the results of this analysis. The postponement of the completion of the marina at the darsena exterior, may actually imply no revenues from fees related to the operation of the marina will be generated,



whereas the CBA currently assumes € 604,600 per year will be paid due to the operation of this marina. To this respect it is relevant checking the concession agreement between the Spanish Authorities and Satocan and confirm the exact scope as well as the terms and conditions of the concession (it is also worth considering that due to the crisis, Satocan also reduced the fees for the use of the yacht and boat slots in 2009);

- The second implication is more strategic and relates to the merit of the major project under assessment; according to the mentioned public available information it is indeed worth noting that due to the crisis, the length of the external dike may be reduced, which actually further confirm the assumption these works were dimensioned more to support the development of a larger marina, rather than to operate ferry services;
- The third implication relates to the timely implementation of the project, given that a change in the contractual and concession terms for both the construction of the infrastructure under appraisal and the *marina* at the *darsena exterior*, may actually imply a delay in the completion of the works.

In addition to this it is worth noting that according to public available information there seem to be legal controversies for the purchase of construction material (sand/gravel) for the construction of the Port¹². Whilst this information should be clarified and confirmed, these elements may also imply delays in the completion of the works part of this major project.

Regarding the implementation of the project, it is finally worth noting that the infrastructure will not be implemented as a PPP project. According to our analysis and understanding of the available information, Satocan will mainly operate the activities related to the marina and fishery operations also regarding boat fuelling and repair, but not the RO-RO freight and passengers' ferry dock¹³. However as already specified, we suggest requesting a copy of the concession agreement between Satocan and the Spanish authorities in order to clearly understand the scope, terms and conditions of the contract.

B.3.1. Recommendations and suggestions

The application dossier omits a satisfactory description of the rationale underpinning the proposed design and dimensioning of the infrastructure to be developed under the second phase of expansion of the Port of Tazacorte, representing the subject of this appraisal. The application is also missing a summary table clearly comparing the infrastructure before and after completion of the second phase of its expansion. This information would in our opinion confirm that despite the project is acceptable under the strict technical stand point, the proposed solution is actually tailored to develop the commercial/shopping activities related to the marinas rather than improve accessibility to La Palma and Tazacorte.

The information provided seem confirming the environmental impact assessment related analysis and proposed mitigation, preventive and compensation measures have been given adequate attention. However the analysis of the documentation would suggest recommending a stronger control by the authorities over the accomplishment of the proposed monitoring programme and related measures. The application dossier is lacking the non-technical summary of the EIS and the Natura 2000 certificate is not properly filled in, duly signed and dated.

From public available information to be confirmed, the contract for the construction of the works part of the major project under assessment and of the concession agreement for the operation of the activities to be developed at the port may be reduced in scope with possible implications on the timely implementation of the investment and on the CBA adopted assumptions and related results. Possible negative implications may also result from legal controversies for the procurement of construction material (sand/gravel) by the consortia responsible of the major project related works.

¹² http://www.eldigitaldecanarias.net/noticia12559.php

¹³ http://eldia.es/2012-02-17/palma/8-grua-privada-sustituye-cofradia-pescadores-puerto.htm



3.2 Project costs

Although no details except those at page 2 of the CBA report were made available, the proposed costs are deemed reasonable for the works to be developed as part of the major project under assessment. The total cost of the investment is consistent among the project dossier (apart from Tables 1.6 and 2.6 of the CBA report) and in line with other public available sources.

B.3.2. Recommendations and suggestions

From public available information concerning the reduction in scope of the contracts for the works under appraisal¹⁴, there seem to be the possibility that the investment costs may be reduced by € 8 million. This should be confirmed and reflected in the calculation of the EU and public contributions and in the CBA. Also, from other public available sources, we understand several works planned at the port over the past decade resulted in an increase in the originally planned investments costs. Given that according to these sources the project is already at an advanced stage of implementation (about 60%), we would suggest asking for a comparison between the bill of quantity and the invoices for the works already completed.

3.3 Demand analysis

The application dossier does not provide a demand study concerning previous and expected RO-RO freight and passenger traffic at the Port of Tazacorte. As further discussed in the following Chapter, the revenue and benefits included in the CBA are not explicitly based on traffic projections.

According to the application, the project is expected to support the development of the port activities in Tazacorte in three main sectors:

- Ferry traffic (passenger activities), due to the development of the passenger and Ro-Ro freight traffic between La Palma and the other Canary Islands;
- Commercial activities in the port area (fishery, aquaculture);
- Yachting marina (also including commercial/shopping related activities);

We would therefore expect the application developing specific demand forecasts for each sector and basing the revenue projections on these forecasts. Given that such information is not included in the application, we provide in the following paragraphs some synthetic considerations about the future prospects of each sector.

Ferry traffic (passenger and freight). The trend of the freight and ferry passenger (excluding cruises) traffic in the Canary Archipelago is included in the Tables 2 and 3 and show that — with the exception of the transhipment port of *La Luz y Las Palmas* — the growth of the inter-island traffic has been very marginal, with freight traffic significantly below pre-crisis volumes and passengers almost constant since 1998. Based on these figures, we would not expect the Canary major growth in traffic volumes for either passenger or freight. Also considering that project would not dramatically improve the functionality of the Port in Tazacorte, and that the island is already served by the port in Santa Cruz de La Palma, we would not expect the project under assessment attracting significant traffic volumes; in line with the application form, it is however plausible that some ferries operating inter-island connections would decide to stop also in Tazacorte and not only in Santa Cruz. On the other hand, as also pointed out in the above mentioned PEOL 2008, the ferry companies operating at the archipelago did not demonstrated much interest in operating at Tazacorte to date.

¹⁴ http://eldia.es/2011-12-15/PALMA/3-Recortan-millones-metros-dique-comercial-obra-puerto.htm



Concerning the freight traffic, and based on the economic profile of the area, one of the most relevant sources of traffic for the Port of Tazacorte might be the export of the agriculture products (in particular *plátanos*); however, as also shown in the graph below, the sector is not in an expansion phase, with the total cultivated area constant in the period 1998-2006; we would therefore not expect that the traffic volumes generated by this sector will significantly grow in the near future.

PLÁTANOS (HAS) TAZACORTE 727,5

Figure 14 Cultivated area in the municipality of Tazacorte

Source: Diagnóstico Económico Villa e Puerto de Tazacorte

Concerning the passenger traffic on line ferry services, the traffic drivers are the demographic trend and the development of the touristic activities. Despite a negative demographic trend in Tazacorte, the inhabitants on the West coast of La Palma have progressively increased since 1980, mainly in the major municipality of the area (*Llanos de los Aridane*)



Figure 15 Demographic trend in Tazacorte

Source: Diagnóstico Económico Villa e Puerto de Tazacorte



Table 2 Traffic Trends at Canarias' Ports – Total Freight Traffic in Tons (1998-2011)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 (e)	CAGR '10-98
CANARIAS	30081872	32647296	33147993	35160033	35859359	39627856	42828829	44778995	45885053	46535500	44101395	37304171	38622976	40224366	2.1%
Puerto de Arrecife	1315888	1456214	1461355	1513681	1538162	1598416	1669676	1738931	1765999	1693069	1479829	1276803	1205896	1286524	-0.7%
Puerto del Rosario	854599	973487	1121271	1211743	1311660	1435597	1625854	1698108	1670180	1534258	1161453	831769	763426	890421	-0.9%
Puerto de la Luz y Las Palmas	12395745	14294783	12333561	14016930	14361394	17233381	18989162	20257615	21288198	22317379	22229462	18145421	19737931	22385698	4.0%
Puerto de Santa Cruz de Tenerife	14013848	14333824	15327316	15450947	15716750	16180133	17145186	17775835	17909073	17865896	16357930	14462690	14402663	13229287	0.2%
Puerto de Los Cristianos	336919	371556	393241	402314	418396	486803	586140	581909	552419	565318	509942	441206	435263	441977	2.2%
Puerto de San Sebastián de la Gomera	228402	232822	230156	248474	249960	303435	367243	348375	320195	322624	301023	243210	224600	213294	-0.1%
Puerto de Santa Cruz de la Palma	856191	894935	922760	926781	931523	918945	954179	920415	984937	963844	875974	814892	808077	762504	-0.5%
Puerto de la Estaca	80280	89675	100765	103002	97605	117500	140255	130404	107139	114016	101963	100194	97598	108221	1.6%
Puerto de Salinetas			1257568	1286161	1233909	1353646	1351134	1327403	1286913	1159096	1083819	987986	947522	885005	0.0%

Source: Instituto Canario de Estadística 2012

Table 3 Traffic Trends at Canarias' Ports – Passengers on ferries (1998-2011)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 (e)	CAGR '10-98
CANARIAS	5,265,799	5,267,225	5,660,635	5,499,999	5,205,799	5,365,050	5,420,824	4,803,625	4,851,004	5,164,882	5,007,754	4,724,917	4,932,277	5,150,787	-0.5%
Puerto de Arrecife	93,189	74,585	87,607	72,959	72,566	68,575	53,230	53,701	40,947	34,829	70,681	72,180	72,197	68,884	-2.1%
Puerto del Rosario	57,731	47,200	69,711	43,581	37,069	35,551	26,020	14,820	9,203	7,417	20,791	10,706	12,537	38,587	-11.9%
Puerto de la Luz y Las Palmas	902,373	769,243	753,274	694,140	584,983	655,986	648,959	461,340	368,148	426,043	625,617	709,010	789,391	798,470	-1.1%
Puerto de Santa Cruz de Tenerife	1,078,576	1,202,358	1,319,049	1,321,878	1,253,060	1,290,796	1,295,541	1,107,063	1,161,202	1,318,192	1,188,587	1,127,933	1,125,204	1,142,904	0.4%
Puerto de Los Cristianos	1,568,994	1,608,428	1,757,398	1,734,282	1,680,848	1,692,660	1,793,874	1,700,414	1,770,880	1,829,579	1,661,578	1,456,335	1,516,944	1,537,872	-0.3%
Puerto de San Sebastián de la Gomera	1,241,298	1,229,362	1,307,953	1,279,984	1,237,706	1,279,875	1,287,029	1,185,509	1,208,200	1,240,694	1,164,196	1,065,815	1,112,863	1,289,758	-0.9%
Puerto de Santa Cruz de la Palma	214,971	206,061	216,658	197,647	194,689	195,564	186,131	164,167	177,312	194,866	182,385	185,939	202,389	176,297	-0.5%
Puerto de la Estaca	108,667	129,988	148,985	155,528	144,878	146,043	130,040	116,611	115,112	113,262	93,919	96,999	100,752	98,015	-0.6%
Puerto de Salinetas			0	0	0	0	0	0	0	0	0	0	0	0	0.0%



Table 4 Traffic Trends at Canarias' Ports – Vehicles (1998-2011)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 (e)	CAGR '10-98
CANARIAS	656,142	736,112	862,965	829,130	818,751	857,023	858,457	789,647	813,244	908,717	922,436	950,418	1,029,000	1,099,917	3.8%
Puerto de Arrecife	21,403	20,547	23,861	21,554	21,144	18,985	17,544	17,403	15,524	18,008	20,895	18,276	18,276	20,526	-1.3%
Puerto del Rosario	9,688	9,255	15,105	9,548	9,928	10,845	7,997	4,248	2,786	2,266	5,629	2,272	2,723	11,021	-10.0%
Puerto de la Luz y Las Palmas	82,493	67,758	88,138	79,568	85,181	95,931	113,151	114,148	103,445	120,916	186,151	191,650	203,706	228,369	7.8%
Puerto de Santa Cruz de Tenerife	136,031	173,676	211,632	211,388	213,914	221,414	226,807	215,697	234,362	278,782	262,524	264,172	271,637	295,821	5.9%
Puerto de Los Cristianos	189,035	223,888	255,122	247,896	240,440	249,863	241,325	216,474	225,327	238,836	216,244	227,963	259,653	265,538	2.7%
Puerto de San Sebastián de la Gomera	147,921	162,512	182,633	174,502	165,953	171,679	165,223	147,094	152,862	164,132	154,152	169,381	187,353	195,259	2.0%
Puerto de Santa Cruz de la Palma	46,098	48,388	51,177	47,275	46,816	51,985	52,437	44,638	48,689	54,678	50,809	51,548	58,110	54,846	1.9%
Puerto de la Estaca	23,473	30,088	35,297	37,399	35,375	36,321	33,973	29,945	30,249	31,099	26,032	25,156	27,542	28,537	1.3%
Puerto de Salinetas		F . K .:	0	0	0	0	0	0	0	0	0	0	0	0	0.0%

Source: Instituto Canario de Estadística 2012



The total resident population in the area is in any case quite limited (less than 35,000 inhabitants in 2005), as it is for the total absolute growth (around +6,000 over 25 years).

COMARCA OESTE

Figure 16 Demographic trend in Tazacorte and in West Coast of Tenerife

Source: Diagnóstico Económico Villa e Puerto de Tazacorte

Los Llanos de Aridane is also the most relevant location of touristic locations and activities The trend in the employment in hospitality activities shows a positive trend until 2007, suggesting that this sector could provide some incremental traffic to the ferry services in La Palma.

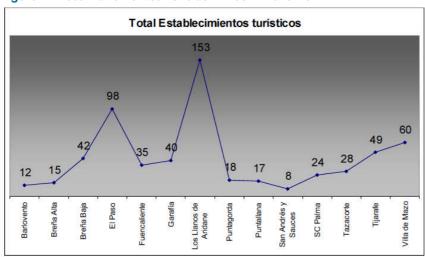


Figure 17 Localization of touristic activities in Tenerife

Source: Diagnóstico Económico Villa e Puerto de Tazacorte



Source: Diagnóstico Económico Villa e Puerto de Tazacorte



Commercial and economic activities in the port. The fishery sector is mentioned in the application as one of the beneficiary of the investment. While the economic operators might benefit of an improved infrastructure, the recent data show a steady or declining trend, also recognized in the mentioned PEOL 2008.

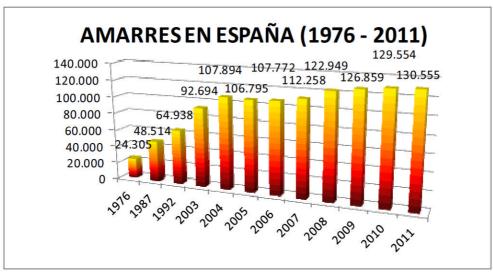
Figure 19 Annual fishery product (tons)

	1999	2000	2001	2002	2003	2004	TOTAL
DEMERSALES	33	9	67	46	46	48	248
PELÁGICOS	302	1	113	101	101	65	625
MOLUSCOS	0	0	0	1	1	1	3
CRUSTÁCEOS	1	0	0	2	2	2	6
TOTAL	336	10	180	115	149	115	882

Source: Diagnóstico Económico Villa e Puerto de Tazacorte

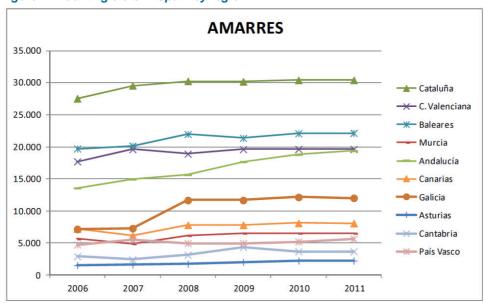
Yachting marina. The trend in the slots available in the yachting marina across Spain suggest that the period of fast growth in the demand of the sector ended at the beginning of the millennium, while today the growth rates tend to decline.

Figure 20 Yachting slots in Spain



Source: Informe Anual de Puertos Deportivos en España 2011

Figure 21 Yachting slots in Spain by region



Source: Informe Anual de Puertos Deportivos en España 2011



The analysis of selling or rental prices for yachting slots shows a contrasting picture, with most of locations suffering the effect of the current economic recession, while some other still enjoy some limited growth. Overall, these data suggest that the profit generated by the sector might be close to saturation and that therefore the capability of additional investment to generate significant revenue should not be taken as granted.

Figure 22 Selling prices for yachting slots in Spain (2008-2011)

	CESIÓN									
Provincia	€/m2 2008	€/m2 2009	€/m2 2010	€/m2 2011	% Variación 2010-2011	% Variación 2008-2011				
ESPAÑA	2.176,94	2.107,89	1.981,71	1.571,37	-20,71%	-27,82%				
Huelva	1.505,21	1.607,89	1.230,28	682,10	-44,56%	-54,68%				
Almería	2.024,20	1.445,66	1.643,32	990,31	-39,74%	-51,08%				
Murcia	2.209,17	1.968,30	2.019,91	1.278,97	-36,68%	-42,11%				
Formentera	3.750,00	3.750,00	3.986,11	2.585,00	-35,15%	-31,07%				
A Coruña	466,16	463,52	693,83	474,20	-31,66%	1,72%				
Alicante	2.373,59	2.150,21	2.070,71	1.511,81	-26,99%	-36,31%				
Barcelona	1.736,69	1.618,25	1.545,37	1.159,68	-24,96%	-33,22%				
Málaga	3.013,52	3.354,16	2.960,78	2.264,41	-23,52%	-24,86%				
Mallorca	2.609,71	2.898,54	2.730,11	2.097,70	-23,16%	-19,62%				
Castellón	1.324,35	1.244,57	1.233,51	957,80	-22,35%	-27,68%				
Pontevedra	909,64	833,61	762,50	594,70	-22,01%	-34,62%				
Granada	3.809,52	4.135,23	4.139,93	3.250,00	-21,50%	-14,69%				
Ibiza	5.263,18	4.638,33	4.693,99	3.834,02	-18,32%	-27,15%				
Tarragona	1.536,57	1.482,68	1.432,59	1.195,66	-16,54%	-22,19%				
Tenerife	1.529,13	2.178,70	1.791,39	1.548,99	-13,53%	1,30%				
Girona	3.691,96	3.451,64	3.167,99	2.748,27	-13,25%	-25,56%				
Valencia	1.671,41	1.378,08	1.270,91	1.143,45	-10,03%	-31,59%				
Lanzarote	1.263,37	1.163,57	1.126,70	1.061,98	-5,74%	-15,94%				
G. Canaria	921,21	1.219,46	1.219,46	1.227,57	0,67%	33,26%				
Menorca	2.093,52	2.444,35	1.849,54	1.950,23	5,44%	-6,84%				
Cantabria	ND	1.855,63	1.482,90	1.582,87	6,74%	-14,70%				
Cádiz	2.527,22	1.980,81	1.832,04	2.195,33	19,83%	-13,13%				
Guipúzcoa	1.663,36	1.218,30	695,48	870,38	25,15%	-47,67%				

Source: Informe Anual de Puertos Deportivos en España 2011

Figure 23 Selling prices for yachting slots in Spain (2008-2011)

			ALQUILE	R ANUAL		
Provincia	€/m2 2008	€/m2 2009	€/m2 2010	€/m2 2011	% Variación 2010-2011	% Variación 2008-2011
ESPAÑA	148,09	131,04	123,77	114,86	-7,20%	-22,44%
Lanzarote	113,03	104,51	86,72	49,23	-43,23%	-56,44%
Málaga	292,24	303,51	304,73	196,15	-35,63%	-32,88%
Alicante	134,09	105,31	103,22	70,95	-31,27%	-47,09%
G. Canaria	ND	152,38	152,38	108,64	-28,71%	-28,71%
Cádiz	387,81	158,20	144,55	106,83	-26,10%	-72,45%
Murcia	101,69	86,62	103,47	80,64	-22,07%	-20,70%
Ibiza	316,43	275,16	320,85	255,39	-20,40%	-19,29%
A Coruña	45,17	44,08	52,79	43,12	-18,31%	-4,53%
Girona	123,35	122,16	144,79	119,17	-17,70%	-3,39%
Valencia	93,93	66,55	62,15	52,97	-14,77%	-43,61%
Tarragona	82,33	77,90	85,26	72,97	-14,42%	-11,37%
Pontevedra	62,21	60,68	59,57	51,66	-13,28%	-16,96%
Tenerife	104,00	162,50	137,50	121,68	-11,50%	17,00%
Almería	166,67	91,67	67,50	66,07	-2,12%	-60,36%
Barcelona	91,87	86,17	86,48	84,90	-1,83%	-7,59%
Castellón	84,57	84,09	78,38	79,04	0,84%	-6,54%
Guipúzcoa	81,33	ND	71,93	87,63	21,83%	7,75%
Mallorca	236,80	246,23	233,46	299,19	28,15%	26,35%
Asturias	ND	ND	55,95	72,76	30,05%	30,05%

Source: Informe Anual de Puertos Deportivos en España 2011



B.3.3 Recommendations and suggestions

A demand analysis should be developed, both for the do-nothing and do-something scenarios, illustrating the most likely trends in the three main sectors affected by the project:

- Ferry traffic (passenger activities), due to the development of the passenger and Ro-Ro freight traffic between La Palma and the other Canary Islands;
- Commercial activities in the port area (fishery, aquaculture);
- Yachting marina (also including commercial/shopping related activities);

The analysis should be based on the past trends in the La Palma island, taking into account the effect of the current recession and the expected economic growth/recovery as appropriate. Our analysis would however suggest that the incremental benefit on the demand operated in the Port of Tazacorte will most probably be very limited, given that most of the traffic and socioeconomic indicators shows modest or null growth.



4 COST BENEFIT ANALYSIS

The Cost-Benefit Analysis (CBA) has not followed the methodology recommended by the following guides:

- Port Investment Assessment Manual (Método de evaluación de inversiones portuarias) developed by Puertos del Estado in 2004;
- Guide to cost-benefit analysis of investments projects, European Commission Evaluation Unit, DG Regional Policy, 2008.

The unit of analysis for the CBA is the entire project under appraisal, which regards the second phase of expansion works of the Port of Tazacorte.

The CBA is not based on the incremental method which compares the costs and benefits between the scenario with the project and an alternative scenario without the project, by providing evidence that the proposed project solution is economically viable or even the most efficient alternative between the options considered. Considering the main objective should be the improvement of accessibility to La Palma, the project application should have therefore specified the improvements occurred to the freight and passenger traffic due to the improved operations with respect to the no-thing scenario. The definition of these scenarios was however not provided.

Moreover, as discussed in § 3.3, the CBA is missing a demand analysis that formulates a hypothesis concerning the project's induced demand and its productive capacity. As this is a key input to the CBA, the analysis should be revised based on realistic and documented demand assumptions.

Concerning the time plan assumptions, the project implementation will be completed by 2012 while operations are expected to start in 2013. Forecasts regarding the financial and economic analysis have been carried out over a period of 49 years, which is overall a very long period. Indeed, the time horizon is not in line with the recommendations that the EC proposes in its 2008 CBA Guide, according to which for the majority of port infrastructures the time frame is 25/30 years at the most.

Also, as explained further on, the discounted cash-flows have been calculated according to the suggested methodology, but as most of the financial assumptions have been erroneously adopted, the results are not meaningful.

Finally, as already specified at Sections 2.1 and 2.2 above, in the context of EU regional policy the project seems not coherent with the objectives of the Priority Axis 8 of the Operational Programme for the Canary Islands. The aim of this priority is to develop transport and communications infrastructures which are indispensable for overcoming the handicaps associated with outermost regions, such as the accessibility. In particular, concerning "non capital" port infrastructures, actions are intended to satisfy freight traffic forecasts with the mainland and the rest of the EU as well as with all the other Canary Islands. For this reason, the CBA must be reviewed by providing more evidence of the relation of the project implementation to satisfy RO-RO traffic.

4.1 Financial analysis

The financial analysis assumes the base year at 2010 and is based on the cash-flows (outflows and inflows) of the main stakeholders: the Spanish Ministry of Economy and Finance (*Consejería de Economia y Hacienda*).

It is worth highlighting the following elements included in the application form and in the Annex II (CBA Report):



- The financial analysis has been carried out at current prices, and an inflation rate of 2% has been taken into account;
- The financial discount rate is assumed to be equal to 4%, including the inflation rate, hence corresponding to 2% in real term. However, according to the 2008 EU CBA guidelines, the European Commission recommends a financial discount rate of 5% in real terms; this assumption should therefore be revised;
- The time horizon for the analysis is 49 years (2010-2059), which is overall a very long period and therefore not consistent with EU recommendations of the 2008 CBA Guide, according to which for the majority of port infrastructures the time frame should be 25/30 years at the most;
- The residual value of the investment is higher than the initial investment (160.3%), which doesn't seem meaningful for the investment to be undertaken;

The following project cash flows have been included in the financial analysis:

- Investment costs: they should amount to € 53.8 million, as properly mentioned in the application form, but in the CBA they are miscalculated (€ 133.1 million in tables 1.6 and 2.6);
- A depreciation rate of 1.1% on fixed annual accumulated assets. However, the methodology of the 2008 CBA Guide recommends that all accounting items, which do not correspond to actual flows, such as depreciation and reserves, are to be disregarded in the determination of the financial net present value, FNPV, and the financial internal rate of return, FRR.
- Cash out-flows: incremental operating costs, whose amount however is not well-defined. In the application form their discounted value is € 30.6 million, while in the CBA it appears to be equal to € 12.9 million.
- Cash in-flows: incremental revenue from the administrative concession paid from the Satocan Group, aquaculture and fisheries fees, maritime line taxes as well as the residual value; the revenue from the Concession is consistent with the current concession, however, all these values seems referred to the total revenue in the do-something scenario and not to the incremental revenue only, and should be therefore revised.
- The Financial Analysis seems developed net of VAT, given that the Beneficiary is entitled to recover it. However this, as well as other details on the investment costs should have been provided in table H.1 of the application form.

4.1.1 Funding Gap and Financial Indicators

The present value of both cash out-flows and in-flows have been correctly calculated and the information included in the application form is generally consistent with that provided in the CBA.

The methodology used to calculate the funding gap is correct. However, on the basis of what referred to above, even if both the FNPV(C) and FNPV(K) are negative, meaning that the revenues generated will not cover the costs and that the grant from the EU would not bring supra-normal profits to the beneficiary, the results of the analysis are not significant.

The cash-flow analysis shows however that the project is not revenue generating, as operating costs exceed operating revenues, and therefore the evaluation of the Funding Gap is not relevant to identify the EU contribution.

4.1.2 Public Contribution Viability

The EU financial aid was considered essential for the implementation of the project within the estimated costs and deadlines.

The co-financing rate of the project was defined as being 50%, in accordance with the 2007-2013 ERDF Operational Programme for the Canary Islands.



B 4.1 Recommendations and suggestions

- The financial analysis should be entirely revised and developed according to the methodology suggested by the relevant national and EU guidelines (Método de evaluación de inversiones portuarias and DG Regio Guide to cost-benefit analysis of investments projects):
- The financial discount rate should be 5% in real terms;
- The time horizon for the analysis should be 25/30 years at the most;
- The residual value of the investment should be lower than the initial investment.
- Investment costs should amount to € 53.8 million, as properly mentioned in the application form, while in the CBA they are miscalculated (€ 133.1 million in tables 1.6 and 2.6);
- Depreciation should not be included;
- Consistent estimate of the incremental operating costs should be provided: in the application form their discounted value is € 30.6 million, while in the CBA it appears to be equal to € 12.9 million;
- Cash in-flows should be based on incremental values rather than total values in the dosomething scenario;
- VAT should be explicitly mentioned in the non eligible costs in Table H.1, also in the event the Beneficiary is entitled to recover it and it is thus not eligible (which should always be explicit).

4.2 Socio-economic analysis

Most of our comments to the financial analysis also apply to the socioeconomic analysis of the project under assessment:

- The analysis has been carried out at current prices, and an inflation rate of 2% has been taken into account;
- The economic discount rate is 4% including the inflation rate, hence corresponding to 2% in real terms. However, according to the 2008 EU CBA guidelines, the European Commission recommends an economic discount rate of 3.5% in real terms; this assumption should therefore be revised accordingly;
- The time horizon for the analysis is 49 years (2010-2059), which is overall a very long period and therefore not consistent with the EU recommendations of the 2008 CBA Guide, according to which for the majority of port infrastructures the time frame should be 25/30 years at the most;
- The residual value of the investment is higher than the initial investment (160.3%), which doesn't seem meaningful for the investment to be undertaken;

4.2.1 Conversion of market to accounting prices

According to the 2008 EU CBA guidelines (and to the general practice in project evaluation), socio economic prices of inputs and outputs to be considered for the CBA should be net of VAT and of other indirect taxes. Also, financial cash flows should be converted from market to accounting prices, in order to reflect the social opportunity cost of inputs and output. Generally, prices in highly competitive markets do not need to be corrected – as it is the case of easily traded goods; on the contrary, labour costs needs to be adjusted to reflect the shadow wage, especially where the unemployment rate is significant.

The CBA included in the application does not comply with these guidelines, as there is no price correction moving from the financial to the economic analysis of the project. This should be



revised, especially including the social cost of labour (and excluding from the benefits the creation of additional employment).

4.2.2 User benefits estimation

The socioeconomic analysis mainly includes the monetary revenue as benefits due to the project, with the only addition of the increased employment. We deem this approach inadequate:

- Wages are a cost for the project, as they measure the value of the human resources involved in the project therefore wages should not be included as benefit, but rather the cost of labour might be reduced by adopting social wages rather than nominal monetary wages; it is worth noting that, given that the employment benefit is the largest included in the analysis, removing it will have a significant negative impact on the economic performance indicators:
- While revenue from concessions and other commercial activities might be measured by the revenue generated to the port, the benefit due to increased ferry services should be estimated based on cost and travel time savings for users (as suggested in the National Guidelines Método de evaluación de inversiones portuarias).

4.2.3 Effects on employment

According to the application form, the project will create 125 new jobs in the construction phase and 73 jobs during the operational period. Whilst these values seem plausible (and could also be confirmed by the Beneficiary as the project is already at an advance stage of implementation), it is important mentioning that they refer to the total number of workplaces, and not to the net effect of reduction of the unemployment, as the new staff will mostly include persons which are already employed.

4.2.4 Economic performance indicators

The economic indicators included in the CBA are correctly calculated based on the annual economic flows; the results included in the application form (point E.2.3 page 15) show that the project is expected to produce benefits (ERR=6.34% and ENPV=€17.9 million). However these results are actually misleading: in fact, these include the EU contribution as an economic in-flow (benefit) to the CBA, which is not correct. On the other hand, the CBA report (Section 2.5) also presents the results excluding the EU contribution (as requested by the DG Regio guidelines) – which are negative: ERR is 3.36% (i.e. 1.36% in real term) and ENPV is -8.2 € million.

Based on these results and on the consideration presented above and concerning the opportunity to exclude from the analysis the benefit due to the employment, we conclude that the socioeconomic analysis shows that it is not worth implementing this project, as the investment and operational costs exceed the expected benefits for the society.

4.3 Risk assessment and sensitivity analysis

The sensitivity assessment included in the application dossier only considers the revenue and the residual value, and mainly shows the effect of more optimistic assumptions, rather than exploring the risks due to project underperformance. This analysis should be revised covering other relevant variables (such as investment and operational costs) – and deeply analysing downside cases.

No risk analysis was performed. On the contrary, the EU 2008 CBA Guide methodology recommends undertaking it, and consequently a risk analysis should have been performed and its results presented as suggested by these guidelines.



B 4.2 Recommendations and suggestions

In addition to the remarks already included with respect to the financial analysis, the following specific recommendations apply to the economic analysis:

- Wages are a cost for the project, as they measure the value of the human resources involved in the project – therefore wages should not be included as a benefit, but rather the cost of labour might be reduced by adopting social wages (included as appropriate conversion factors) rather than nominal monetary wages;
- The EU contribution should be removed from the economic analysis, as this is by no mean a project benefit;
- The benefit due to increased ferry services should be estimated based on cost and travel time savings for users (as suggested in the National Guidelines - Método de evaluación de inversiones portuarias);
- A more complete sensitivity and risk analysis should be developed, covering the most relevant variables and showing the impact due to more conservative or downside assumptions.



5 KEY FINDINGS AND CONCLUDING REMARKS

5.1 Key questions for project appraisal

(a) Is the application dossier complete?

In terms of formal documentation, the project dossier is almost complete and complying with the EC Regulations, and the information provided is consistent with Art. 40 of Reg.1083/2006, Annex XXI and Commission Regulation 1828/2006. Despite this, application dossier is missing the non-technical summary of the Environmental Impact Study and the Natura 2000 certificate provided in Appendix 1 to the application form is either missing or not properly filled in and duly signed and dated.

(b) Does the project meet the expected strategic and functional objectives?

Based on the analysis of the application dossier and other public available information, it may be concluded that the major project under appraisal does not effectively contribute to the realization of the objective under the Priority Axis VIII of the *Programa Operativo de Canarias 2007-2013*. Although the investment is implemented conjointly with other relevant complementary works having a positive impact on the environment (i.e. *Emisario Submarino y Terrestre del Puerto de Tazacorte*), and specified that the proposed works overall support the development of all the different activities at the Port with multifaceted possible benefits, the proposed design and the main facts on the evolution of the project reveals that the main objective of the expansion are aimed at increasing the yachting activities by developing the marinas and the related commercial activities. Again, whilst this is not in line with the objectives of the EJE 8 of the PO FEDER Canarias 2007-2013, the improvement of the infrastructure for the operation of RO-RO freight and passengers' ferry services is minimal. It is worth adding that these improvements could have been done by mean of minor expenditures and less environmental impacts. [See § 2.1 and 2.2.].

(c) Is the project consistent with the EU policies?

The major project under appraisal is complementary to another investment relating to the development of the Port of Tazacorte, also co-financed by the ERDF in the previous programming period 2000-2006, for a total amount of € 10,233,878.30. We suggest cross-checking and comparing the scope and objectives of this project, and the results of previous appraisals, where available. Contrary to what stated in the application dossier, the Port of Tazacorte is not included in any TEN-T transport network; we suggest correcting the application dossier [See § 2.3].

(d) Is the project technically sound?

The application dossier omits a satisfactory description of the rationale underpinning the proposed design and dimensioning of the infrastructure to be developed under the second phase of expansion of the Port of Tazacorte, representing the subject of this appraisal. The application is also missing a summary table clearly comparing the infrastructure before and after completion of the second phase of its expansion. This information would in our opinion confirm that despite the project is acceptable under the strict technical stand point, the proposed solution is actually tailored to develop the commercial/shopping activities related to the marinas rather than improve accessibility to La Palma and Tazacorte [See § 3.1.1 and 3.1.2.].

The information provided seem confirming the environmental impact assessment related analysis and proposed mitigation, preventive and compensation measures have been given adequate attention. However the analysis of the documentation would suggest recommending a stronger control by the authorities over the accomplishment of the proposed monitoring programme and related measures. The application dossier is lacking the non-technical summary



of the EIS and the Natura 2000 certificate is not properly filled in, duly signed and dated [See § 3.1.4].

From public available information to be confirmed, the contract for the construction of the works part of the major project under assessment and of the concession agreement for the operation of the activities to be developed at the port may be reduced in scope with possible implications on the timely implementation of the investment and on the CBA adopted assumptions and related results. Possible negative implications may also result from legal controversies for the procurement of construction material (sand/gravel) by the consortia responsible of the major project related works [See § 3.1.4].

(e) Are the project costs reasonable?

On the basis of the project description and the details provided in the project dossier, the costs relating to the construction works are reasonable. From public available information concerning the reduction in scope of the contracts for the works under appraisal, there seem to be the possibility that the investment costs may be reduced by € 8 million. This should be confirmed and reflected in the calculation of the EU and public contributions and in the CBA. [See § 3.2.].

(f) Are the results of the demand analysis acceptable?

A demand analysis should be developed, both for the do-nothing and do-something scenarios, illustrating the most likely trends in the three main sectors affected by the project:

- Ferry traffic (passenger activities), due to the development of the passenger and Ro-Ro
 freight traffic between La Palma and the other Canary Islands;
- Commercial activities in the port area (fishery, aquaculture);
- Yachting marina (also including commercial/shopping related activities);

The analysis should be based on the past trends in the La Palma island, taking into account the effect of the current recession and the expected economic growth/recovery as appropriate. Our analysis would however suggest that the incremental benefit on the demand operated in the Port of Tazacorte will most probably be very limited, given that most of the traffic and socioeconomic indicators shows modest or null growth. [See § 3.2.].

(g) Are the results of the Financial Analysis acceptable?

The approach and methodology for the financial analysis is not correct, as they significantly deviate from the EU recommendations. We recommend revising it based on an incremental approach clearly defining the do-nothing and do-something scenarios and including a more precise evaluation of the monetary in and out flows [See recommendations and suggestions box B.4.1].

(h) Is the value of EU contribution correctly estimated?

Given that the project is not revenue generating, the amount of the EU contribution is correctly estimated. [See § 4.1.2 and recommendations and suggestions box B.4.1].

(i) Are the foreseen socio-economic benefits likely to be attained?

The estimated benefits should be revised based on the following recommendations [See recommendations and suggestions box B.4.2]:

The wages should not be included as a benefit, but rather the cost of labour might be reduced by adopting social wages (included as appropriate conversion factors) rather than nominal monetary wages;



- The EU contribution should be removed from the economic analysis, as this is by no mean a project benefit;
- The benefit due to increased ferry services should be estimated based on cost and travel time savings for users (as suggested in the National Guidelines - Método de evaluación de inversiones portuarias).
- (j) Are the results of the Cost Benefit Analysis acceptable?

Given the incorrect evaluation of the benefits generated by the project, we recommend to revise the socioeconomic analysis as appropriate. Also, based on the results presented in the CBA report, and on the consideration presented above concerning the opportunity to exclude the benefits due to the employment from the analysis, we conclude that the socioeconomic analysis shows that it is not worth implementing this project, as the investment and operational costs exceed the expected benefits for society [See recommendations and suggestions box B.4.2].

5.2 Concluding remarks

We would recommend not giving a positive answer to this application for co-financing; the major project, already at an advance stage of implementation, is not corresponding in its layout and operation to the objectives of the Priority Axis VIII of the *Programa Operativo de Canarias 2007-2013*. In addition to this major impediment, other aspects of the application either related to clear description of the project, the environmental impact assessment related information and the assumptions adopted for the CBA and its results do not support the case to invest on this project. Recent information on the development of the project may even put into question the reliability of the information and data used for the preparation and submission of the application dossier.