Establishment of an innovative production plant for significantly improved aircraft components

Quick appraisal of major project application

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Quick appraisal of major project application:

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Budowa innowacyjnego zakładu produkcji znacząco ulepszonych podzespołów dla przemysłu lotniczego

Nr CCI [2012PL161PR046]

Establishment of an innovative production plant for significantly improved aircraft components

Quick Appraisal carried out under Framework contract N°CCI 2009CE160AT090for the provision of technical assistance services for the preparation, appraisal, monitoring, and closure of projects receiving assistance from the ERDF, Cohesion Fund and IPA, and for the audit of these projects by the European Court of Auditors (ECA) - Lot 3: industry, energy, ICT and knowledge economy investments

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1 Project overview

The direct goal of the investment is to create a modern, technologically advanced manufacturing plant of aircraft components.

HS Wroclaw Sp. z o.o. (HSW) has noticed that present trends on the aircraft market indicate that the demand for innovative high quality components such as valves, actuators, gearboxes and propeller brakes has been continuously growing. These components should be produced according to the best available technologies since they are critical parts of each modern aircraft. The aircraft market demands new solutions guaranteeing top efficiency and reliability. At the same time, low mass of individual components and high cost effectiveness are expected.

The new manufacturing plant, including the assembly and testing of components, provides HSW with a potential to supply competitive products and provide new solutions on the global market.

The realization of the project will help HSW to reach competitive supremacy in the area of aircraft products and to adapt to new trends on the market through, among others, offering lighter, more fuel-saving and more reliable products.

The products scheduled for implementation under the project will be manufactured in safer and more environment-friendly processes allowing for an increase in efficiency and control of aircraft and helicopters on which they will be applied.

The technological processes anticipated for implementation include:

- Heat treatment, galvanic treatment and machining, assembly and testing of components and fuel valves for the NGPF (next generation product family);
- Heat treatment, galvanic treatment and machining, assembly and testing of fuel valves for Rolls-Royce engines type SGT.

It is envisaged that the components manufactured under this project will meet the high standards of the aircraft business (low tolerance in relation to technical parameters), while allowing HSW to offer a series of advantages to its customers – recipients of the final products (airplane producers and users).

Main output products:

- Matched valves;
- Nozzle housings;
- Fan housings;
- Valve housings;
- Actuator housings;
- Engine nozzles;
- Propeller brakes;
- Actuation assembly and testing;
- Engineered items;
- Other technologically advanced components for the aircraft business, depending on the current orders.

Total cost of the investment reaches € 65,835,206. The “decision amount” i.e. the amount to which the priority axis refinancing rate is applied (Art. 41 Para. 2 of the Regulation of the Council No. 1083/2006), is: € 14,244,849. Applying the Priority axis co-financing rate of 85% the eligible community contribution is € 12,108,121.

The project will create 307 highly-qualified jobs in Poland (indirectly 934 jobs), including those in the production, administration and the R&D department (the unemployment rate as of May 2012 was 12,8% in this

region of Poland). In addition, 118 engineers will find employment in the engineering department. Approximately 66% of new hires individuals will hold a university diploma, thus the newly hired staff will prove a high substantial potential, which will positively affect HSW's image as an employer who hires highly-qualified staff.

The project will have a positive impact on achieving the goals of balanced development and will contribute to the promotion by the Community of environmental protection and state enhancement pursuant to Art. 17 of the Regulation of the Council (EC) No. 1083/2006.

2 Appraisal approach

The main goal of this Quick Appraisal of the *"Establishment of an innovative production plant for significantly improved aircraft components"* project is to verify how adequately this project has been prepared and whether the application submitted to the European Commission is compliant with the EC requirements, which govern the usage of European Union funds.

Moreover, this Quick Appraisal has been prepared to assist the European Commission in assessing the quality of the received application dossier and its consistency with the priorities and objectives of the Operational Programme, its contribution to achieve these priorities and objectives, and its consistency with other EU policies.

The appraisal approach is based on the following criteria:

- The completeness of the application documentation submitted to the European Commission, based on the requirements set out in the relevant EU and local regulations; and
- The quality of the application submitted and of the project itself, based on an in-depth analysis of the project application dossier. The quality assessment has verified the compliance of the application with relevant regulatory requirements, guidance established by the European Commission and by the Contracting Authority.

The analysis is based on the available project documentation i.e.:

- Letter from the managing institution - Ministry of Regional Development.pdf (Polish version)
- HSW's application for the confirmation of the financial contribution.docx (English version)
- HSW's application for the confirmation of the financial contribution.docx (Polish version)
- HSW's financial model.xls (Polish version)
- Gantt Chart.pdf (Polish version)
- Financial tables.pdf (Polish version)
- Feasibility study.doc (Polish version)
- All the relevant documents in Polish, especially documents concerning environmental policy.

On the basis of this Quick Appraisal Report the EC should be able to decide whether:

- The project objectives are well defined and the project is technically sound;
- The project is worth co-financing;
- The public contribution is justified; and
- The project is consistent with other EU policies and priorities.

3 Completeness assessment

The completeness assessment has been done on the basis of the project's documents delivered to the European Commission by the authority responsible for the project i.e. the Ministry of Regional Development in Poland. The documents have been prepared by HSW, who will be responsible for the project implementation. It has been checked whether all the information required by the EC has been provided.

The outcome of the completeness assessment is presented in the completeness assessment checklist provided in Section 7.1.

3.1 Addresses and references

Addresses are provided in Section A of the application dossier for the authority responsible for the application and the organisation responsible for the project implementation.

Institution responsible for the application (i.e., managing or intermediary institution)

Name:	*Ministry of Regional Development,*
	Operational Programs Implementing Department
Address:	*Wspólna 2/4, 00-926 Warszawa*
Contact:	*Iwona Wendel,*
	Undersecretary of State at the Ministry of Regional Development
Tel.:	*+ 48 22 330 32 57*
Telex/Fax:	*+48 22 330 33 67*
E-mail:	*daniel.szczechowski@mrr.gov.pl*

Authority responsible for the Project realization (beneficiary)

Name:	*HS Wrocław Spółka z ograniczoną odpowiedzialnością*
Address:	*51-317 Wrocław , ul. Bierutowska 65-67*
Contact:	*Wojciech Wasik*
Tel.:	*+ 48 603 857 135*
Telex/Fax:	*+ 48 71 714 80 01*
E-mail:	*wojciech.wasik@utas.utc.com*

3.2 Project presentation

The project is well presented. The application dossier pursuant to Article 39 – 41 of the Regulation (EC) No. 1083/2006 is set out in a clear manner. The project category is identified as the "productive investments" (according to the EC Regulations No. 1083/2006, 1828/2006, 1080/2006).

The application for contribution from ERDF under the Operational Programme *Innovative Economy*, defined as "the development of the Polish economy based on innovative enterprises" is clearly justified. The project is

consistent with the specific objectives of the OPIE such as: "increasing competitiveness of enterprises" and "creation of sustainable and better jobs".

The ERDF shall also focus its assistance on "supporting sustainable integrated economic development and employment at regional and local level by mobilizing and strengthening endogenous capacity in operational programs aimed at modernization and diversification of economic structures, as well as the creation and safeguarding sustainable work". The OPIE will contribute to the implementation of the horizontal specific objective of the National Strategic Reference Framework 2007-13 (NSRF) – "improving the competitiveness and innovativeness of enterprises, including, in particular, the manufacturing sector with high added value and development of the service sector".

The scope of the project is compliant with these objectives and it contributes to their achievement.

The description of the project is comprehensive. The project's main objective is to create a modern, technologically advanced manufacturing plant of aircraft components. The total value of the project is PLN 261,016,842 (ca. € 65,835,206 using the exchange rate of 3,9647 adopted in the application dossier). The investment project is beeing carried out in Wroclaw (Lower-Silesian Voivodeship), where the unemployment rate amounts to 12.8% (state as of the end of May 2012).

3.3 Project feasibility

The project's target market has been defined as the global market of airplane producers. The total demand for the aircraft components manufactured in Wroclaw was assessed to reach 59,283 units in 2015 with a growing tendency forecast for the forthcoming years supported by some of the largest airplane producers including Boeing, Airbus and Embraer.

In the comparative analysis, the following options have been considered:

- Option I – Basic technology based on manual work.
- Option II – Technology based on solutions which are well known and broadly applied in the industry e.g., for the manufacture of the previous component models in other plants of the Group.
- Option III – Technology based on new solutions, supported by additional innovations developed at HSW.

3.4 Timetable

The Project's feasibility study was carried out from August 2010 to the end of October 2010. In that period, HSW took actions related only to the planning of the schedule and expenses necessary to implement the innovative investment project. Cost and benefit analysis was performed from September 2010 to 15 October 2010.

The realization of the project started in November 2010, directly after the application request submission. The end of the construction stage is planned for 31 December 2013. The operational stage completion date is 2020.

The progress of work satisfactory described in technical, administrative and financial terms.

3.5 Cost-Benefit Analysis

The financial and the economic analyses have been performed pursuant to the Guide to the Investment Project Cost and Benefit Analysis issued by the European Commission.

The financial analysis was prepared in two versions – with the grant and without the grant. Without the grant, the FNPV value is negative and indicates that the project would be unprofitable. With the grant, the FNPV is positive and indicates that the project is profitable.

Sensitivity analysis is consistent with the Commission approach and is based on sensitivity analysis and quantitative risk analysis.

3.6 Analysis of environmental impact

The project is consistent with the objectives identified in Art. 17 of the Regulation of the Council (EC) No. 1083/2006 of 11 July 2006 establishing the general regulations related to the European Regional Development Fund, European Social Fund and Cohesion Fund.

According to the Guide to the selection criteria of projects to be financed under the "Operational Programme Innovative Economy for 2007-2013", the projects whose result is at least 10% of ecological efficiency indexes, the efficiency being defined as the ratio of the specific ecological objective (result) to the expenses incurred for such an objective, are considered to be the projects that have a positive impact on natural environment. The project meets these criteria.

The project observes the rules related to preventive actions for avoiding environmental damage. A range of preventive solutions will be used to minimize the project impact on the environment.

Pursuant to the national and EU regulations, HSW will be responsible for all the changes in the natural environment resulting from the project, through the calculation and paying relevant environmental fees in observance of the "polluter pays principle".

In order to obtain a decision on environmental conditions for the approval of the project, the consultations have been conducted with the environment protection authorities - The Mayor of Wroclaw, Department of Environment and Farming; Regional Environment Protection Director in Wroclaw; Department of Environment Protection and Natura 2000 Areas; the Voivodeship Sanitary-Epidemiological Station, and WSSE.

HSW assumed that the term "investment outlays on environment protection" should be understood as: outlays on methods, technologies, processes, equipment whose purpose is to monitor, reduce, prevent or eliminate contamination or environmental damage resulting from the company's activities.

The share of the outlays on environment protection, in relation to the total investment outlays in the project under consideration, is 4%.

3.7 Justification for the public contribution

The investment project is subject to state aid. Financial support in the amount of € 14 244 848 is necessary for its realization (ordinance of the Minister of Economy of 8 May 2009 on granting the financial aid for investment projects of a high significance for economy under the Operational Programme Innovative Economy, 2007-2013 (J.o.L. No. 75, Item 638). Measure 4.5.1 OP IE).

The decision on the establishment of a new manufacturing plant by HSW was preceded by a detailed analysis of the profitability of individual investment options of the project and the choice of the option preferred for realization.

As a result of detailed studies, it was found that granting public aid to HSW for the realization of the project will also affect the project scale and the number of jobs created.

3.8 Financing plan

The financing plan is reported in section H of the document Attachment XXII - HSW's. According to the plan the total project costs amounts at € 65,835,206. The non-eligible costs are estimated at € 18,356,161. The total eligible costs are € 47,482,828 of which 31,558,302 corresponds to the systems and machines investments whereas the remaining part of € 15,924,526 concern construction work.

The Community contribution has been correctly assessed at € 12,108,121 considering the EU aid regulations. The private contribution is € 30,625,388. Other funding sources are: i) National contribution for € 2,136,728 and ii) other souces for € 20,964,969.

The yearly financing plan of the Community contribution is: € 1,617,262 in 2012 and € 10,490,859 in 2013.

3.9 Compatibility with EU policies and Law

The project is compatible with the EU policies and law specifically in relation to environmental impact as set out in the application dossier and other documents concerning project.

3.10 Endorsement of competent national authority

The application dossier has been signed by the Ministry of Regional Development, *Operational Programs Implementing Department*, as the institution responsible for the implementation of the project.

4 Quality assessment

The quality assessment aims to verify the quality of the key elements of the application dossier submitted to the European Commission. It also includes checking the compliance of the project documents and application dossier with the relevant regulatory requirements and its alignment with the relevant guidance established by the European Commission.

The outcome is presented in the quality assessment checklist provided in Section 7.2.

4.1 Context and project objectives

The social, institutional and economic contexts of the "*Establishment of an innovative production plant for significantly improved aircraft components*" project are clearly described.

The project envisages establishing a modern production plant including assembly, designing and testing as well as an internal R&D department that will allow HSW to implement technologically advanced solutions to manufacturing qualitatively improved aircraft components. The investment will allow HSW to introduce essential changes into its production processes and siginificantly increase their efficiency.

The benefit arising from the project realization can be considered at the level of the Company/Group, and at the regional and country-wide level. The following aspects can be pointed out within the scope of the benefits:

- complex approach to the manufacturing of parts (including the testing and the development of components through a full manufacturing process – from the design until the execution of the element);
- potential for the optimization of the global supply chain through the development of the cooperation with local vendors in the case of machining, assembly and testing;
- increased quality and effectiveness owing to the implementation of new technologies.

From the regional and country-wide perspective, the following positive impacts of the project can be found:

- creation of attractive, high quality jobs in the aircraft sector;
- cooperation with the sector of small and medium enterprises and research centres in Poland – the transfer of know-how and the development of the chain of suppliers for the aircraft industry;
- the transfer of the specialist knowledge (know-how) in the area of aircraft technology between the scientific and research centres and HSW and the Group will cause an increase in the scientific level and a more effective operation of HSW;
- significantly improved products (advanced technology applied to the components of aircraft constructions manufactured in the new plant);
- knowledge and practice in the testing and production of technologically advanced housings of valves, actuators, fans and nozzles, in the manufacturing technology and other mechanical components of aircraft constructions.

All these benefits are attainable through the project. The project is coherent with the EU objectives of the ERDF and with the national strategy and the priorities of the Operational Programme Innovative Economy.

4.2 Project identification

The project identification has been very well described in the feasibility study in terms of:

- The object and scope of the project (location, total costs, eligible and non-eligible costs, innovations in manufacturing processes and in new products);
- Resources (know-how, infrastructure, human resources);
- The project objectives (innovative technologies, R&D aspects, new jobs, implementation of innovative management system – ACE)
- Compliance with the Operational Programme Innovative Economy (rise in the competitiveness of enterprises, rise in the competitiveness of the Polish science and increase of the role of science in the economic growth, increase in the innovative share of the products of the Polish economy on the international market, creation of permanent, quality jobs, rise in the use of IT and communication technologies).

4.3 Project timetable and maturity

The project implementation timeframe presented in the feasibility study as well as the provided GANTT chart is realistic and reasonable. All project phases have been clearly and correctly identified.

The maturity of the project has been correctly assessed. The project was initiated in 2010 with a feasibility assessment, followed by cost and benefits analysis, an environmental impact statement and applying for all the necessary licenses. The realization of the project started in November 2010, directly after the application request submission.

The received permissions and decisions from different authorities show that the project has been approved by the local and regional authorities and welcomed by public opinion.

4.4 Feasibility and options analysis

The application dossier contains sufficient evidence of the project feasibility in terms of management, human resources, know-how and financial sources. Also economic, engineering, institutional, implementation and environmental aspects have been analysed.

The do-nothing scenario and other alternative options have been considered. Nevertheless the alternative options analysed do not seem as credible alternatives to the project set-up proposed for co-financing.

The feasibility study conducted confirmed the HSW's capacity to realize the project. On the other hand, the financial, cost and benefit analyses as well as sensitivity and risk analyses performed confirmed the appropriateness of the investment project realization in Wroclaw. It is not possible to know if different variants of the project would have been a better fit to receive a co-financing under Submeasure 4.5.1 of the Operational Programme Innovative Economy. Besides, the environment interference analysis demonstrated that the project does not exert a negative impact on the environment.

The funding will guarantee the project completion, especially in its initial phase, in which the investor bears the highest risk. Conversely, the realization of the project in its full extent will not be possible without co-funding from the EU. Lack of external co-financing from the EU is likely to result in significantly reducing the scope of the project.

4.5 Financial analysis

The financial analysis of the project and the total budget assessment are clear, realistic and reasonable.

The investment total costs (€ 65,835,206) include:

- Community contribution € 12,108,121
- National sources € 2,136,728
- National private sources € 30,625,388
- Other sources – credits € 20,964,969

Total eligible costs (€ 47,482,828) include costs of construction works and costs of systems, machines and equipment. VAT is non-eligible.

The financial analysis was prepared for two options – with and without the grant. Without the grant, the FNPV value is negative and FRR value is lower than the discount rate assumed for calculation. With the grant, the FNPV is positive and FRR value is higher than the discount rate. Therefore, the investment project needs public grants to be profitable from the financial point of view.

The discount rate used is 8%. This differs from the reference value proposed by the Commission but no justification has been provided. The adoption of the standard value for this parameter – 5% – would have made the project profitable without public support (in fact the FRR is 7.88%). The application dossier should justify the adoption of a discount rate equal to 8%.

4.6 Economic analysis

The economic analysis was performed according to the CBA methodology. As a result of it, the following main indicators have been obtained:

Social discount rate	5.5%
Economic rate of return	13.96%
Economic net present value	€ 15,692,080
Cost benefit ratio	1.04

The impact of the project on employment expressed in Full Time Equipment is: 307 directly created jobs and 934 indirectly created jobs at the realization stage.

The other main identified benefits of the project are:

- Raising export potential;
- Increase in revenues from taxes on physical and legal persons;
- Increasing the visibility and reputation of the City of Wroclaw and of the Lower-Silesian Voivodeship, as technologically advanced centre of the aircraft business;
- Reducing the risk of employee injuries due to accidents during the manufacturing process;
- Positive impact on the professional development of the employees;
- Increasing cooperation with scientific centres and universities;
- Providing opportunities for student internships;
- Continuation of the support programme for diploma and PhD students – support in conducting research work related to HSW's production profile;
- Training opportunities for employees;
- Development of local SMEs.

4.7 Risk assessment

The sensitivity analysis aimed to indicate how changes in values of the critical project variables affect the value of the project's financial and economic effectiveness indexes.

The following parameters were analyzed:

- sales volume;
- selling price variation;
- input cost variation.

The largest FNPV variations were observed for selling price and input costs. On the other hand, the project demonstrates a lower sensitivity to changes in the sales volume.

The risk evaluation was conducted in order to assess the financial stability of the investment through the indication whether the risk factors identified are likely to produce a loss of financial effectiveness and financial liquidity. The analysis was performed through the determination of the probability distribution of critical variation and the assessment of the probability distribution of the financial and economic project's effectiveness indexes.

Based on these analyses it was concluded that the risk of achieving negative values of indexes is much higher without the grant.

4.8 Consistency with EU policies and law

The project is compatible with the EU policies and law specifically in relation to environmental impact as set out in the application dossier and other documents concerning project.

5 Overall project appraisal

5.1 Are the project objectives well defined and is the project technically sound?

The main project objective is to create a modern and more technological advanced manufacturing plant for aircraft components. In particular the investment project will contribute to:

- improve significantly products quality thanks to the advanced technology applied to the components of aircraft constructions manufactured in the new plant, as well as process efficiency;
- produce benefits for region in term of creation high quality jobs in the aircraft sector and streghtening cooperation within the sector among small and medium enterprises and research centres in Poland. This is critical to improve aircraft industry competitiveness at global level.

The above project objective will be reached through investment in high-tech production technologies that will significantly improve the production processes and will put the industry in the position to compete at global level. From a technical point of view the project is technically sound and will take advantages of the following elements:

- Good technical experience of HSW;
- Location of the manufacturing plant in existing and new industrial buildings;

Good financial, social-economic, and risk/sensitivity analyses that demonstrates the project feasibility. The information provided by HSW regarding the innovation and the technology is comprehensive.

5.2 Is the project worth co-financing?

According to the applicant documentation and the information provided the project is worth of cofinancing.

The project carries a positive economic net present value considering the impact on development of the area concerned. The economic aspects have been considered through a well-documented analysis with clear financial projections of the project, clearly showing the socio-economic benefits of the project. An environmental impact assessment has been carried out showing the positive results on the environment.

The presence of HSW in the region of the Lower-Silesian Voivodeship will generate positive spill-overs by creating the potential for cooperation networks mainly among the local enterprises but also in the regional and national industry or aircraft component.

The project due to its size, complexity and technological advancement will participate in achieving the Lower-Silesian Voivodeship Development Strategy until 2020:

- activation of the scientific environment,
- construction of the innovative infrastructure,
- financing of innovations,
- lowering of barriers to the activities of innovators,
- education for innovations,
- propagating pro-innovative activities,
- balanced development,
- broadly understood upgrading of the economic structure,
- rise in the competitiveness,
- counter-acting and fighting against the long-term unemployment,
- development of the modern economy staff.

To sum up, the project is worth co-financing because it is advantageous from the point of view of both the HSW and the region since it will have a positive impact on the region, especially in terms of:

- rise in the level of innovativeness and expenses on R&D in the region,
- impact on the development of clusters,
- stimulation of the technology and knowledge transfer – between SMEs, clusters and scientific centres,
- reduction of the unemployment,
- positive impact on the environment.

5.3 Is the public contribution justified?

On the basis of the documentation provided the project the public contribution seems justified. HSW financial and economic analysis confirms that the project indicators have negative values in the absence of EU funding.

Nevertheless, the financial analysis should provide reasonable arguments for the financial discount rate used in the calculations of the performance indicators to clearly demonstrate the presence of a funding gap. An ERDF contribution, in line with state aid regulation appears, to be justified based on the project goals.

5.4 Is the project consistent with other EU policies?

The project is consistent with EU regulations and law. In particular it is consistent with Art. 12 of the Commission Regulation (EC) No. 800/2008 of 6 August 2008 recognizing some types of aid as conforming to the common market in application of Art. 87 and 88 of the Treaty (general regulation on block exclusions).

The project is also consistent with the objectives of the Operational Programme *Innovative Economy* 2007-2013 – that concerns the development of the Polish economy basing on innovative enterprises. The HSW project contributes to the realization, among others, of the following objectives (comprehensively included in the Feasibility Study under Paragraph 2.2.3):

1. rise in the competitiveness of enterprises,
2. rise in the competitiveness of the Polish science and increase of the role of science in the economic development,
3. increase in the innovative share of the products of the Polish economy on the international market,
4. job creation by creation of 307 new jobs and 934 jobs indirectly
5. rise in the use of IT and communication technologies.

6 Recommendations

6.1 Recommendations for the organisation responsible for project implementation

On the basis of the information collected the most important recommendations to the organisation responsible for the project implementation are the following:

- A solid justification for the financial discount rate value should be provided to give assurance on the intensity of the funding gap.
- The application dossier should include a more detailed information regarding cooperation between HSW and local and regional SMEs and also between HSW and research centres.
- Additional details should be provided on how local companies can be benefited by the investment. Indeed, in general Polish companies are characterized by a low readiness to implement innovations, and only a minor percentage of companies operating in the investment region can be classified to the innovative group. Although one of the Operational Programme Innovative Economy objects is to change this situation and make the small and medium enterprises more innovative and competitive on the global market it could be useful to understand how the project could contribute to improve innovation through propulsive effects to local economy.
- More information is needed about potential cooperation with Research Institutes. The project dossier informs about the cooperation between HSW and Technical Universities in Wrocław and Poznań. However it is missing the analysis relating to the cooperation with research centres more oriented to the technology implementation in industry. Indeed it is well known that scientific work performed at the universities is characterized by the basic technology research while works carried out by the Research Institutes are more oriented to innovation industrial implementation.

6.2 Recommendations for the European Commission

According to the information provided by the application dossier, the project appears to be valuable both in terms of direct and indirect effects on local economy. The project is worth co-financing because, without the investment there is the risk that HSW will lose the opportunity to innovate and improve it efficiency to defend the present market position.

Nevertheless, before taking any decision with respect to the funding request, the Commission should ask an appropriate justification for the financial discount rate adopted (8%), which diverges form the standard rate (5%). This is necessary to provide assurance on the existence of a co-financing need, that EU funds are required to improve the return profile of the project and eventually make it viable. As the project is subject to state aid, a positive financial rate of return is acceptable, yet assurance on the performance indicators is needed.

7 Appendix: Quick Appraisal Checklists

7.1 Appendix 1: Completeness assessment checklist

APPLICATION SECTION	ASSESSMENT	COMMENTS/REFERENCES
ADDRESSES AND REFERENCES		
Authority responsible for the application	Y X N ☐ N/A ☐	
Organisation responsible for project implementation	Y X N ☐ N/A ☐	
PROJECT PRESENTATION		
Title of project / project phase	Y X N ☐ N/A ☐	
Categorisation of project activity	Y X N ☐ N/A ☐	
Compatibility and coherence with the Operational Programme	Y X N ☐ N/A ☐	
Project description	Y X N ☐ N/A ☐	
Project objectives (and location)	Y X N ☐ N/A ☐	
PROJET FEASIBILITY		
Demand analysis	Y X N ☐ N/A ☐	
Options considered	Y X N ☐ N/A ☐	
Summary of feasibility studies conclusions	Y X N ☐ N/A ☐	
Capacity considerations	Y X N ☐ N/A ☐	
TIMETABLE		
Project timetable	Y X N ☐ N/A ☐	
Project maturity	Y X N ☐ N/A ☐	
COST-BENEFIT ANALYSIS		
Financial analysis	Y X N ☐ N/A ☐	
Socio-economic analysis	Y X N ☐ N/A ☐	
Risk and sensitivity analysis	Y X N ☐ N/A ☐	
ANALYSIS OF ENVIRONMENTAL IMPACT		
Contribution to/respect of environmental sustainability	Y X N ☐ N/A ☐	

Consultation of environmental authorities	Y X N ☐ N/A ☐	
Environmental Impact Assessment	Y X N ☐ N/A ☐	
Assessment of effects on NATURA 2000/sites of nature conservation importance	Y ☐ N ☐ N/A X	
Additional environmental integration measures	Y ☐ N ☐ N/A X	
Cost of measures taken for correcting negative environmental impacts	Y X N ☐ N/A ☐	
Consistency with sectoral/ integrated plan and programme (in case of projects in the areas of water, waste water and solid waste).	Y ☐ N ☐ N/A X	
JUSTIFICATION FOR THE PUBLIC CONTRIBUTION		
Competition	Y X N ☐ N/A ☐	
Impact of EU assistance on project implementation	Y X N ☐ N/A ☐	
FINANCING PLAN		
Cost breakdown	Y X N ☐ N/A ☐	
Total planned resources and planned contribution from EU funds	Y X N ☐ N/A ☐	
Annual financing plan of EU contribution	Y X N ☐ N/A ☐	
COMPATIBILITY WITH EU POLICIES AND LAW		
Other EU financing sources	Y ☐ N ☐ N/A X	
IFI financing	Y ☐ N ☐ N/A X	
Existence of legal procedure for non-compliance with EU legislation	Y ☐ N ☐ N/A X	
Publicity measures	Y X N ☐ N/A ☐	
Involvement of JASPERS in project preparation	Y ☐ N ☐ N/A X	
Public procurement	Y ☐ N ☐ N/A X	
Previous history of the recovery of assistance	Y ☐ N ☐ N/A X	
ENDORSEMENT OF COMPETENT NATIONAL AUTHORITY		
Signed endorsement	Y X N ☐ N/A ☐	
ANNEXES		
Declaration by authority responsible for monitoring Natura 2000 sites/sites of nature conservation importance	Y X N ☐ N/A ☐	
Cost-Benefit Analysis	Y X N ☐ N/A ☐	
Technical sheets	Y X N ☐ N/A ☐	
Feasibility study (summary)	Y X N ☐ N/A ☐	
EIA non technical summary	Y X N ☐ N/A ☐	
Copies of relevant decisions permits & other documents	Y X N ☐ N/A ☐	

Maps	Y X N ☐ N/A ☐	
Others (please provide detail)	Y ☐ N X N/A ☐	

7.2 Appendix 2: Quality assessment checklist

ASSESSMENT QUESTIONS	ASSESSMENT	COMMENTS/REFERENCES
CONTEXT AND PROJECT OBJECTIVES		
The social, institutional and economic contexts of the project are clearly described	Y X N ☐ N/A ☐	
The project objectives are clearly defined	Y X N ☐ N/A ☐	
The expected project benefits are identified and clearly defined in terms of socio-economic indicators	Y X N ☐ N/A ☐	
The foreseen socio-economic benefits are likely to be attainable with the implementation of the project	Y X N ☐ N/A ☐	
All the most important socio-economic effects of the project have been considered in the context of the region, sector or country concerned	Y X N ☐ N/A ☐	
The project is coherent with the EU objectives of the Funds? (Art. 3 and Art. 4 Reg. 1083/2006 for the ERDF and CF, Art. 1 and Art. 2 Reg. 1084/2006 for the CF; Art. 1 and Art. 2 Reg. 1085/2006 for the IPA)	Y X N ☐ N/A ☐	
The project is coherent with the overarching national strategy and priorities defined in the national strategic reference frameworks and the operational programmes (Art. 27 and Art. 37 Reg. 1083/2006 for the ERDF and CF, Art. 12 Reg. 1080/2006 for the ERDF)	Y X N ☐ N/A ☐	
The means of measuring the attainment of objectives is indicated, and their relationship, if any, with the targets of the Operational Programmes is defined.	Y X N ☐ N/A ☐	
PROJECT IDENTIFICATION		
The project constitute a clearly identified self-sufficient unit of analysis	Y X N ☐ N/A ☐	
The project is defined with appropriate quantified indicators	Y X N ☐ N/A ☐	
The project's concept, outputs and capacity increase to the baseline are meaningful	Y X N ☐ N/A ☐	
The indirect effects of the project been properly considered (or excluded if appropriate shadow prices are used)	Y X N ☐ N/A ☐	
The network effects of the project have been	Y X N ☐ N/A ☐	

considered		
The economic welfare calculation is based on a consideration of costs and benefits for all potentially affected parties	Y X N ☐ N/A ☐	
PROJECT TIMETABLE AND MATURITY		
The project phases have been clearly and correctly identified	Y X N ☐ N/A ☐	
The maturity of the project has been correctly assessed	Y X N ☐ N/A ☐	
The project implementation timeframe is realistic and reasonable	Y X N ☐ N/A ☐	
Dependencies and constraints have been properly taken into account in the project timetable	Y X N ☐ N/A ☐	
FEASIBILITY AND OPTIONS ANALYSIS		
The application dossier contains sufficient evidence of the project's feasibility (from an economic, engineering, institutional, management, implementation, environmental…point of view)	Y X N ☐ N/A ☐	
The do-nothing scenario ('business as usual') has been analysed to compare the situations with and without the project	Y X N ☐ N/A ☐	
Other alternative feasible options have been adequately considered (in terms of do-minimum and a small number of do-something options)	Y X N ☐ N/A ☐	
The chosen technical solution(s) is/are appropriate and sustainable according to market and technological developments, future demand and capacity constraints, etc.	Y X N ☐ N/A ☐	
Demand for the project outputs has been properly analysed and is and/or will be adequate and significant (long run forecasts)	Y X N ☐ N/A ☐	
The location of the investment is suitable and the local context is favourable to the project (i.e. there are no physical, social or institutional binding constraints that could threaten the project feasibility)	Y X N ☐ N/A ☐	
Appropriate technology is available for the project implementation	Y X N ☐ N/A ☐	
In the case of productive investments/R&D/energy, the relevance and impact on public infrastructures have been properly considered, e.g. necessary links to transport network (air, road/rail connections, etc.), links to other utilities, public sector responsibilities to provide "new services", etc.	Y ☐ N ☐ N/A X	
The incentive effect of the requested aid has been assessed and found to be significant (i.e. the proposed aid is necessary to produce a real incentive effect to undertake investments which would not otherwise be made in the area,	Y X N ☐ N/A ☐	

or to ensure that the beneficiary undertakes (additional) investment in the region concerned)		
FINANCIAL ANALYSIS		
Depreciation, reserves, and other accounting items which do not correspond to actual flows have been eliminated in the analysis	Y X N ☐ N/A ☐	
The determination of cash flows has been made in accordance with an incremental approach	Y X N ☐ N/A ☐	
The choice of discount rate is consistent with the Commission's or Member States' guidance	Y X N ☐ N/A ☐	
The choice of the project's time horizon is consistent with the values recommended per sector for the 2007-2013 period[1]	Y X N ☐ N/A ☐	
The residual value of the investment has been calculated	Y X N ☐ N/A ☐	
A nominal financial discount rate been employed (in the case of using current prices)	Y X N ☐ N/A ☐	
The main financial performance indicators have been calculated (FNPV(C), FRR(C), FNPV(K), FRR(K)) considering the right cash-flow categories	Y X N ☐ N/A ☐	
The project's calculated financial rate of return is at an appropriate level to justify a potential EU contribution	Y X N ☐ N/A ☐	
Private partners in the project are expected to earn normal profits as compared with some financial benchmarks (if applicable)	Y ☐ N ☐ N/A X	
If the project does not benefit from any form of state aid, the financial analysis demonstrates the existence of a funding gap and the need for EU assistance in order to make the project financially viable	Y ☐ N ☐ N/A X	
If the project benefits from state aid, the requested EU grant has been properly calculated (the EU contribution may not exceed the maximum state aid allowed for a project)	Y ☐ N ☐ N/A X	
If the project is a revenue generating project[2], the amount to which the EU co-financing rate applies has been identified in accordance with EU regulations (Art. 55 Reg. 1083/2006)[3]	Y ☐ N ☐ N/A X	
ECONOMIC ANALYSIS		

[1] 25 years for Energy, 30 years for Water and environment, 30 years for Railways, 25 years for Roads, 25 years for Ports and airports, 15 years for Telecommunications, 10 years for Industry, 15 years for Other services.

[2] A revenue-generating project means any operation involving an investment in infrastructure the use of which is subject to charges borne directly by users or any operation involving the sale or rent of land or buildings or any other provision of services against payment (Article 55 of Council Regulation 1083/2006).

[3] For revenue-generating projects, the maximum eligible expenditure is identified by Article 55(2) Regulation (EC) N. 1083/2006 as the amount "that shall not exceed the current value of the investment cost less the current value of the net revenue from the investment over a specific reference period". Such identification of the eligible expenditure aims at ensuring enough financial resources for project implementation, avoiding, at the same time, the granting of an undue advantage to the recipient of the aid (over-financing).

The cost-benefit analysis (CBA) demonstrates that the project yields a positive economic net present value considering its impact on the development of the area where it is to be implemented.	Y X N ☐ N/A ☐	
The prices of inputs and outputs have been considered net of VAT and of other indirect taxes	Y X N ☐ N/A ☐	
The prices of inputs, including labour, have been considered gross of direct taxes	Y X N ☐ N/A ☐	
Subsidies and pure transfer payments have been excluded from the analysis	Y X N ☐ N/A ☐	
Externalities have been included in the analysis, including environmental externalities (e.g. application of the polluter pays principle and assessment of effects on NATURA 2000 sites)	Y X N ☐ N/A ☐	
Shadow prices have been used to reflect the social opportunity cost of the resources employed	Y ☐ N X N/A ☐	
Sector-specific conversion factors been applied (in the case of major non-traded items)	Y ☐ N X N/A ☐	
The appropriate shadow wages have been chosen in accordance with the nature of the local labour market	Y ☐ N X N/A ☐	
The chosen social discount rate is consistent with the Commission's or Member States' guidance	Y X N ☐ N/A ☐	
The main economic performance indicators have been calculated (ENPV, ERR and B/C ratio)	Y X N ☐ N/A ☐	
If the economic net present value of the project is negative, there important non-monetised benefits to be considered	Y ☐ N ☐ N/A X	
RISK ASSESSMENT		
The choice of the critical project variables is consistent with the elasticity threshold proposed	Y X N ☐ N/A ☐	
The sensitivity analysis has been carried out variable by variable and possibly using switching values	Y X N ☐ N/A ☐	
The expected value criterion has been used to evaluate the project performance	Y X N ☐ N/A ☐	
Ways to minimise the level of optimism bias have been considered	Y ☐ N X N/A ☐	
Risk mitigation measures have been identified and are adequate	Y ☐ N X N/A ☐	
OTHER EVALUATION APPROACHES		
If the project has been shown to have important effects that are difficult to assess in monetary terms, the opportunity to carry out an	Y ☐ N ☐ N/A X	

additional analysis, such as CEA or MCA, has been considered		
The choice of the additional analysis is suitable with the fields of application of CEA and MCA	Y ☐ N X N/A ☐	
If a CEA has been performed, incremental cost-effectiveness ratios have been calculated to exclude 'dominated' alternatives	Y ☐ N ☐ N/A X	
If an MCA has been performed, the weights applied are consistent with the relative importance of the projects effects on society	Y ☐ N ☐ N/A X	
If the project is likely to have a significant macroeconomic impact, the opportunity to carry out an Economic Impact Analysis has been considered	Y X N ☐ N/A ☐	
CONSISTENSY WITH EU POLICIES AND LAW		
The project is consistent with relevant EU policies and law in the field of sustainable development, protection and improvement of the environment.	Y X N ☐ N/A ☐	
The project is consistent with EU competition policy and regulations and is not likely to generate competition distortions	Y X N ☐ N/A ☐	
The project is consistent with EU public procurement regulations	Y X N ☐ N/A ☐	
The project is consistent with gender equality and anti-discrimination EU policies	Y ☐ N ☐ N/A X	
If the project is in the field of industry, the project is in line with the objectives of the Europe 2020 Flagship Initiative "An Integrated Industrial Policy for the Globalisation Era" and may contribute to their achievement	Y X N ☐ N/A ☐	
If the project is in the field of energy, the project is in line with the objectives of the Europe 2020 Flagship Initiative "A resource-efficient Europe" and may contribute to their achievement	Y ☐ N ☐ N/A X	
If the project is in the field of ICT, the project is in line with the objectives of the Europe 2020 Flagship Initiative "A Digital Agenda for Europe" and may contribute to their achievement	Y ☐ N ☐ N/A X	
If the project is in the field of the knowledge economy, the project is in line with the objectives of the Europe 2020 Flagship Initiative "Innovation Union" and may contribute to their achievement	Y ☐ N ☐ N/A X	

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