Luxembourg, 24.04.2012

Environmental and Social Data Sheet

Overview

Project Name:	Amadeus RDI
Project Number:	2011 0525
Country:	France / UK
Project Description:	The project concerns the promoter's RDI activities for the development of new and improved IT solutions for the operation of airlines, airports, hotels and railway operators. More specifically the applications will support the operators in increasing the operational efficiency and the service quality by introducing realtime data, open technologies and web services. The RDI is entirely carried out in Europe with a focal point in France.

EIA required:	NO
Project included in Carbon Footprint Exercise[1]:	NO

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project activities do not fall under Annexes I and II of the EU Directive 97/11/EC, as amended by Directives 97/11/EC and 2003/35/EC, and are therefore not subject to mandatory Environmental Impact Assessments (EIA).

The proposed investments concerns RDI activities for software development, which will take place within facilities already used for similar activities. Thus, no particular negative impact on the environment is expected.

Therefore, the project has been rated as acceptable (A) i.e. no significant negative residual impacts. Hence, the project is considered acceptable in environmental terms.

[1] Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

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Environmental and Social Assessment

Environmental Assessment

Amadeus implemented in 2009 an Environmental Management System (EMS), which serves as a management tool designed to evaluate, report and improve the environmental performance of our operations. It is based on the initial measurement of current impacts, compilation of best practices and recommended actions worldwide, establishing targets for the future whilst also following up on results achieved. Today, the key indicators tracked, are related in this priority order, to energy, CO_2 emissions, paper, water and waste. Also particular attention is paid to Amadeus' data centre, which has been awarded the prestigious 'Energy-efficient Enterprise – Data Centre' certification by international organisation TüV Süd. The certificate was received in 2010 for the first time and then renewed in 2012 and 2015. The certification process involves and in-depth review of the data centre operations, as well as recommendations for improvement.

One common metric to measure data centres' energy efficiency is the Power Usage Effectiveness (PUE)[2]. The most recent global average PUE of data centres available at the closing of this document, according to the Uptime Institute in 2014, was 1.7. Amadeus' data centre PUE was 1.36 in 2014 and 1.35 in 2015.

Beyond the efforts dedicated to reduce the environmental impact of our operations, Amadeus has developed technologies to help airlines and other industry players reduce their own impact, and therefore make our contribution to industry sustainability. For example, the Flight Management module of Amadeus Altéa Departure Control System, through optimum weight calculation and optimisation tools, can help airlines save significant amounts of fuel, economic costs and greenhouse gas emissions, as compared with less sophisticated technologies currently on the market.

Other solutions like Amadeus Airport Sequence Manager help airlines to reduce the amount of time an aircraft is taxiing at the airport runway, reducing fuel consumption, costs, greenhouse gas emissions, noise, local pollution, as well as optimising the use of airport infrastructure.

Finally, Amadeus works with other industry players like the International Civil Aviation Organisation (ICAO) to work in common projects towards industry sustainability. At the moment Amadeus uses in some of their distribution platforms the ICAO carbon calculator.

[2] PUE measures the total facility power divided by the IT equipment power. The closer the PUE to one, the more efficient the data centre is.