

## Chapter 9

# An Integrated Information System to Support the Management of World–Widely Spread Educational Resources for the Greek Ministry of Education

**John Garofalakis**

*Research Academic Computer Technology Institute, Greece*

**Andreas Koskeris**

*Research Academic Computer Technology Institute, Greece*

**Theofanis-Aristofanis Michail**

*Research Academic Computer Technology Institute, Greece*

**Flora Oikonomou**

*Research Academic Computer Technology Institute, Greece*

### ABSTRACT

*In this chapter, a Government Resource Management System for the efficient organization of wide-spread manpower resources is presented. It concerns the case of the Greek Ministry of Education which manages several educational resources (educational units and teachers) spread around the globe to provide education opportunities for students with Greek origin. After reviewing the problems which have arisen from previous situation concerning the administration of this wide-spread man-power and the primitive tools used to collect information for effective operational activities (e.g. appointment of teachers to several educational units, selection of teachers to be transferred in educational units abroad, payment procedures), an integrated Web-based solution has been designed, developed, and applied. This case study is presented in detail in the following pages along with the benefits of this implementation and the concepts for its further exploitation.*

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## INTRODUCTION

The purpose of this chapter is to present a specific case of a web based tool aiming to assist the Greek Ministry of Education for the management of widely distributed educational resources (teachers and schools) around the World (for the provision of Greek education for students with Greek origin World Wide). The presented work is based on a complete initial research concerning Governmental Resource Management Systems (GRM) and Governmental Enterprise Resource Planning Systems (GERP).

Based on one of the Greek government's "Digital Strategy 2006-2013" (<http://www.infosoc.gr/infosoc/el-GR/sthnellada/committee/default1/top.htm>) objectives to "let the Greek Public Administration improve its internal procedure by effectively using new Information and Communication Technologies", and in combination with the above mentioned initial research, an "umbrella" of applications have been developed and integrated to one Information System. This information system is used in order to help the Greek Ministry of Education for the daily activities related with the management of the educational units offering Greek education around the Globe.

The functional requirements of the system were based on the detailed study of the way the whole operation management worked until now. This includes the way that teachers were selected to be transferred outside Greece, how they were appointed to specific educational units, how the daily education operation was assessed, as well as issues concerning payment procedures administration. The functional requirements were also based on the conclusions obtained from the problems of the non-ICT based approach which was followed in the past. This analysis led the research team to design several applications to focus on each procedure, dealing with all of its specific problems and difficulties. However, in order to be able to establish a "new way of administration" it was

important to integrate all these applications in one Environment adapted to the user level.

Through an evaluation of System's operation until now, this paper also attempts to suggest a set of methodological guidelines that could be used in the future by organizations with similar widely spread resources, in their effort to follow an ICT-based resource planning and management approach.

The methodological approach for contents of the forthcoming sections includes the following:

- Firstly, we present a Framework of Analysis including an overview of the situation world widely, in relation with Governmental Resource Management and Resource Planning systems.
- In the Sections to follow, the specific case study of the Greek Ministry of Education, is presented in detail, along with an evaluation (in qualitative and quantitative basis) and suggestions for further work

## THE USE OF GOVERNMENT RESOURCE MANAGEMENT SYSTEMS

*Resource management* is the efficient and effective deployment for an organization's resources (human capital, infrastructures etc) when they are needed (Project Management Institute, 2004). Current Research and Practice in Resource Management, and especially in Human Resource Management, are targeting to the identification of practices and tools adapted to context specific nature of different organizations (Budhwar, P., Debrah, Y., 2008), resulting to optimal Organization performance (Boon, C., Boselie, J.P., Dietz, G., 2005).

Information and Communications Technologies (ICT's) can play a very important role towards the achievement of this goal and there are several *resource management software tools* available



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