

## Success Story – BADR System

The Customs & Excise and Indirect Tax Administration (ADII) of Morocco  
April 2009

### Presentation of ADII and the BADR project

BADR stands for "Automated Customs & Excise Network Base" (*Base Automatisée des Douanes en Réseau*). It is the new computer system of the Moroccan Customs & Excise and Indirect Tax administration (*Administration des Douanes et des Impôts Indirects* or ADII) that will eventually replace the SADOCS system. It is an integrated application that covers the complete customs and excise activity management process.

The main objectives of BADR are to have:

- a standard, open, lasting technical environment based on web technologies, and a broader access through an Internet portal or through EDI (Electronic Data Interchange);
- a higher quality service for business operators, ADII partners and customs officer users.

It features an enhanced, user-friendly interface (interactive, online help, clear error messages) and improved performance.

BADR also covers all the needs of operators and Customs & Excise departments and provides better conditions for controlling and monitoring Customs & Excise operations.

This new system is composed of four levels according to a predefined functional breakdown.

### The need and the challenges

In November 2007, ADII began commissioning level 2 stage of BADR, which manages the circuit covering the detailed declaration up to liquidation, payment and collection of goods. It had already undergone a long period of preliminary functional tests with a population of operators and Customs & Excise agents.

*"We chose adhoc International after a broad survey involving about ten suppliers. The adhoc offer clearly stood out from the others. Firstly, because we felt it was the system that best understood the problem and the context of the project and also because of the level of commitment to results, which was quite simply total.*

*The issues and challenges were major: we had to get the system up and running again at all cost, with the guarantee that everything would work perfectly".*

**Nabyl Lakhdar,**  
IT Division Head  
Administration des Douanes et des  
Impôts Indirects (ADII)

At that time, the BADR system, including level 2, was confronted with a user load comprised of 3,500 declarants and 1,200 Customs & Excise

agent users. Various performance-hindering problems rapidly arose, which prevented normal operation and resulted in a roll-back to the previous SADOc system.

The ADII then decided to issue an international call for tenders in 2008, aimed at acquiring the know-how to vouch for its computer system's high performance and service quality, in order to guarantee a rapid re-commissioning of level 2.

adhoc International won the bid and accepted the challenge of committing to get the BADR system back up again within six months.

In the first stage, adhoc International accompanied ADII teams to carry out an application audit of BADR and its operating environment, to identify critical points that impact stability and performance.

*"The BADR system is a strategic tool for the ADII. We are proud to have been able to help get this system back into production and to certify its performance, thus demonstrating the value of the Performance Assurance approach that adhoc International proposes to customers throughout Europe, Middle East and Africa."*

**Thierry Bettini,**  
Business Development Director,  
adhoc International

*"I think what swung the ADII decision is the quality and detailed consistency of our proposal. We managed to show that our teams have the key factors for success that we consider essential, such as competence, know-how and quality support from our R&D laboratory, which is specialized in preparing performance solutions."*

*"Another thing that helped us gain the trust of ADII managers is the relevance of a tested approach, confirmed through a broad spectrum of customers with the same or similar environments. All these factors motivated us to submit our tender, despite the criticality of the situation. We were confident because we fully master these issues."*

**Makram Hanin,**  
Managing Director  
adhoc International.

The next stage, defined by the audit recommendations, proceeded with the necessary corrections and configurations for a secure return to BADR production.

BADR started running again and has been used daily by all parties concerned since January, 5 2009.

ADII can now be proud of having an innovating, efficient system that is essential to proper management of Customs & Excise activities

and the Kingdom's economic development.

## The solution

adhoc International's business is an expert in information systems and critical applications Performance. The solutions proposed are based on its state of the art expertise and know-how in the field of Performance engineering, capitalized over many projects conducted for large companies and government services in Europe and the Maghreb.

The approach applied in the context of the BADR system is based on a series of solutions adapted to ADII needs and challenges:

- Taking into account the multi-dimensional aspect of performance which links factors coming from the application, the resources and the load,
- An approach that covers the application's complete lifecycle: adaptive, systematic approach,

aimed at the systematic specification, analysis, evaluation, surveillance and optimisation of the applications' stability and performance, throughout their lifetime,

- A "Performance Engineering" type of approach, based on a method, a process and actions aimed at addressing the complexity of performance-related problems in a systematic way and capitalizing on the experiences encountered in the context of the various actions conducted,
- Solid know-how on developing, integrating and managing Java application platforms capitalized in a unit that proposes technical components, processes and guidelines for the development, integration and use of Java composite applications critical to performance,
- Mastery of performance instrumentation, measurement and analysis techniques of web or J2EE technologies.

*"We effectively assisted the ADII team in getting level 2 into production. I would now like to continue our close collaboration and I am convinced that the Performance Assurance approach introduced by the ADII teams, and the resulting service quality, will culminate in a real project to standardize and industrialize their IT system."*

**Nabil Ouerhani,  
Consultancy Director,  
adhoc International**

## The results

The ADII and adhoc International decided that the main objective of the first engagement (audit) was to restore production of the BADR system Level 2 without impacting the service quality supplied to users.

This objective was reached on January 4 2009, following work to optimize and upgrade several application components relative to both the first and second level. Significant gains in performance and stability were achieved.

Regarding the service quality supplied to users, the frequency of appli-

cation-related system downtime perceptible to end-users was improved by a factor of 50.

The response time for certain services was shortened tenfold.

*"Besides the input of know-how and their excellent supervision, what we most appreciated in adhoc International's intervention was their understanding of the project. We sensed that failure was not an option for them. Actions that did not necessarily fall within the framework of the assignment were nonetheless conducted to leave no room for failure. Furthermore, the cooperation with the technical team of Customs & Excise was exemplary, so much so that we very rapidly had the impression that it was just one team."*

**Nabyl Lakhdar,  
Head of the IT Division  
Administration des Douanes et des  
Impôts Indirects  
(ADII)**

## About adhoc International

adhoc International is a consultancy firm that specializes in Performance and Service Quality of IT systems.

Armed with know-how, the success of its Performance Assurance approach and steady, renewed support from its customers and partners, the company has expanded its international presence by opening subsidiaries in the Middle East and Africa and signing structuring partnerships.

Based in Switzerland, adhoc International now has offices in France, Germany, Morocco and Tunisia. With 70 consultants at the end of 2008, all specialists on Performance issues, and over 450 projects conducted on these topics with over 70 customers, adhoc International is a recognized Performance expert in Europe, the Middle East and Africa.

Our value added stems from a real capacity to propose very high level consultancy and support services on all topics related to IT Performance. As a result, we can support our customers in the construction, testing, management and governance of their IT environments and critical business applications.

