



Jordan Loan Guarantee Corporation

***Analysis of JLGC's
Information Technology Requirements
with Regard to Underwriting***

Submitted by
Deloitte Touche Tohmatsu Emerging Markets
First Washington Associates, Ltd

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TABLE OF CONTENTS

I	INTRODUCTION	1
II	PRE-SHIPMENT GUARANTEE RECOMMENDATIONS	2
III	POST-SHIPMENT GUARANTEE RECOMMENDATIONS	3
IV	OTHER RECOMMENDATIONS	4

APPENDICES

Appendix A Exporter Information/Credit History

Appendix B List of ECA's with Web Sites

I INTRODUCTION

As part of its scope of work to provide technical assistance to the JLGC, FWA's Actuarial/Underwriting Advisor is required to provide the following deliverable during the course of his assignment: An analysis of JLGC's information technology requirements with regard to underwriting procedures to include online connections with information/credit history database, banks, etc. This report is submitted in fulfillment of this obligation, following 8 weeks in which JLGC's underwriting procedures and needs were observed and discussed with JLGC's management, with banks, exporters and others. The recommendations herein are also based upon FWA's experience with credit guarantee agencies in 60 other countries around the world.

The recommendations herein are divided between those pertaining mainly to the pre-shipment guarantee program and those with major implications for the post-shipment guarantee program. However, it is of paramount importance that all changes and improvements be part of an integrated operations/IT process, rather than being compartmentalized and only available to a limited user group within JLGC. All recommendations should be pursued as part of a unified process, thus avoiding the possibility of continuing the negative implications of separate databases, re-keying the same data for different purposes, awkward interfaces, laborious information generation, and similar problems.

Not detailed in this report is JLGC's need for computer-assisted credit evaluation, such as is embodied in the envisaged credit scoring system. The proposed credit scoring model, which incorporates an Expert System and an automated underwriting rating system, is explained in detail in another FWA report. Properly used, this unified scoring model will serve multiple purposes and contribute significantly to upgrading JLGC's information technology for underwriting.

Also mentioned, but not elaborated upon, in this report is the need for a comprehensive exporter information database. This is the subject of a separate deliverable prepared by FWA's IT/Database Advisor. The separate report on JLGC's exporter information database provides full recommendations on the basic architecture for this part of the IT system.

II PRE-SHIPMENT GUARANTEE RECOMMENDATIONS

JLGC's pre-shipment program could benefit from a number of IT innovations designed to improve accuracy, timelines, and comprehensiveness of data output. On-line connections to external sources of information and internal linkages with other JLGC program data can also improve the basis for underwriting decisions in the pre-shipment guarantee program. Since this program concerns itself with the creditworthiness of Jordanian exporters, a useful by-product is an information database on numerous local firms, which may be saleable to outside parties interested in current and reliable local credit information. Recommended information technology improvements related to the pre-shipment guarantee program include the following:

- **Exporter Information Database** JLGC should implement an exporter information database incorporating all of the information contained in form 201 applications and including a record of prior experience with JLGC. An outline of the information to be included in this database is given in Attachment AA≡.
- **Central Bank Connectivity** When warranted by transaction volumes, JLGC should investigate the possibility of establishing an on-line connection with the Central Bank to provide information on exporters' payments of previous bank loans.
- **Credit Reporting Agency Connectivity** If a new credit reporting agency is established in Jordan, JLGC should explore the possibility of establishing an on-line connection for purposes of obtaining the most current readings on creditworthiness of exporter applicants.
- **Participant Bank Connectivity** On-line connections should be established with selected banks in Jordan to obtain basic information on their experience with applicant borrowers, and to facilitate the transmission of applications, approvals, amendments, progress reports, claims and recoveries information, and other pre-shipment program documents. JLGC should start with only the most active banks using its programs and offer similar facilities to other banks only if they increase the volume of their guarantee activity.

III POST-SHIPMENT GUARANTEE RECOMMENDATIONS

Because of its special relationship with COFACE, JLGC has not developed comprehensive in-house IT systems to permit state-of-the-art underwriting related to its post-shipment guarantee program. Computer improvements needed when JLGC moves to underwrite post-shipment guarantees on its own will include

- **Insurance Policy Administration** JLGC should design and install a comprehensive computerized system for administering post-shipment insurance policies. This should include automated checking of premium calculations, sending billing notices, generating reminders on policy renewal, and producing notices of exporter and JLGC actions necessary to keep policies in good order.
- **Exporter Information Database** JLGC should assure that the exporter information database containing pre-shipment information also includes data from post-shipment guarantee application forms, and records of prior experience with JLGC in the post-shipment guarantee program.
- **Foreign Buyer Information Database** JLGC should maintain a complete system of recording information on all foreign buyers for which credit limits have been requested, incorporating data on application forms and records of prior experience with JLGC.
- **Country Limitation Schedules** JLGC should maintain in its computer base country limitation schedules from other post-shipment guarantee agencies as well as a current country limitation schedule for JLGC which is up-dated on a regular basis.

IV OTHER RECOMMENDATIONS

Other enhancements are needed by JLGC in order to bring its systems up to the highest standards. These enhancements would improve underwriting results in all programs and also improve the efficiency and effectiveness of JLGC across the board. Recommendations for general IT improvements include:

- **Credit Information Services on Jordanian Exporters** Selected information from JLGC's database on individual firms could be made available to overseas and domestic subscribers on a fee basis. This information would result mainly from JLGC's underwriting experience under both pre-shipment and post-shipment guarantee programs.
- **Claims and Recoveries Information** Claims and recoveries information on all programs needs to be unified and fully incorporated into exporter and foreign buyer information files. Such data are an important ingredient of underwriting, not only for individual firms which may have been involved in claims, but also for firms which may be selling similar products, to the same countries, or to the foreign buyers.
- **Connectivity With Other Credit Guarantee Agencies** Underwriters and others in JLGC can benefit from an increased flow of information with foreign credit guarantee agencies in addition to COFACE. For this purpose, it is suggested that JLGC initiate bilateral exchanges on underwriting experience with other credit guarantee agencies on buyers, countries, etc. A list of other ECAs with web-sites currently in place is shown as Appendix B.
- **Connectivity With Other Sources of Buyer and Country Information** JLGC should explore the possibility of obtaining buyer and country information from such sources as Dun & Bradstreet, the U.S. Department of Commerce, U.S. Securities and Exchange Commission, regional stock exchanges, BankStat, Thomson Bank Watch, Euromoney, and many others, using web sites maintained by those organizations.
- **Personalized Instruction in Computer Usage** After implementation of the coordinated solutions recommended by FWA's IT/Database Advisor, a local IT professional should be contracted to provide individualized instruction in computer usage for senior managers of JLGC. This would consist of one-on-one training in internal and external information resources, and might encompass 1-3 hours per week per manager until the manager becomes fully conversant with the subject of the instruction.

**DATABASE FRAMEWORK FOR
EXPORTER INFORMATION/CREDIT HISTORY**
(Can be used for DLG Borrowers as well with minor modifications)

#	PARAMETER GROUPS	Main Screen "Basic Information"	Add Field Size Field a,n,a/n Type Mandatory/Optional
1 00	Dates & Numbers	1 04 Unique Identifying JLGC Party #	
2 00	Names & Addresses	2 01 Full Legal Name	
3 00	Country Details	5 03 Legal Form	
4 00	Communication Details	2 02 Trade Name	
5 00	Organizational Details	2 03 Short Name	
6 00	Sectors, Products & Markets	6 03 Sector	Functional Segregation
7 00	Information Sources	6 04 Sub-Sector	Systems Administrator
8 00	Short Financial Details	2 06 City/Town/Village	Data Input Operators
9 00	Financial Statement Details	2 07 Postal Code	Authorizing Officers
10 00	Ratings & Opinions	3 01 Country	Evaluator Input
		Scroll List of Names	
#	ELEMENTS BY GROUP	1 04 Unique Identifying JLGC Party #	
1 00	Dates and Numbers	2 01 Full Legal Name	Country Codes
1 01	Report Date	Or Enter 2 02 Trade Name	Adopt ISO/SWIFT
1 02	Date of Current Update	Or Enter 2 03 Short Name	FORMAT = 2 a, e g
			JO=Jord
1 03	Date of Last Update		an
1 04	Unique Identifying JLGC Party #	Result = Sub Screen	US=USA
		Top of Screen	(banks can provide
1 05	JLGC Report #	1 04 Unique Identifying JLGC Party #	full inventory for data entry)
1 06	Commercial Registration No	2 01 Full Legal Name	
1 07	Amman Financial Mkt Serial #	2 02 Trade Name	
		2 03 Short Name	Geographic Group Code
2 00	Names & Addresses	2 06 City/Town/Village	Determine most useful

2 01 Full Legal Name
2 02 Trade Name
2 03 Short Name
2 04 Address Line 1
2 05 Address Line 2
2 06 City/Town/Village
2 07 Postal Code

3 00 Country Details

3 01 Country
3 02 Country Region
3 03 Geographic Group
3 04 Geographic Possession
3 05 Country Holidays

4 00 Communication Details

4 01 Telephone Number
4 02 Fax Number
4 03 Telex Number
4 04 Email Address
4 05 Prime Contact Name
4 06 Prime Contact Title
4 07 Internet URL

5 00 Organizational Details

5 01 Date of Establishment
5 02 # of Years in Export Business
5 03 Legal Form
5 04 # of Employees
5 05 Owners/Shareholders
5 06 Owner Nationality
5 07 Principal Place of Business
5 08 Parent Organization

3 01 Country
Lower Part of Screen
Tabs to
Address Details
2 04 Address Line 1
2 05 Address Line 2
2 06 City/Town/Village
2 07 Postal Code
Country Details
3 01 Country

3 02 Country Region
3 03 Geographic Group
3 04 Geographic Possession
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5 06 Owner Nationality
5 07 Principal Place of Business
5 08 Parent Organization
5 09 Sister/Daughter Companies
5 10 Global Code

Products & Markets

combinations, e g
ME=Middle East
AP=Asia/Pacific
NA=North America
CA=Carribbean
LA=Latin America
SA=South America
EU=European Union
EE=Europe-other
AF=Afric
a

or
OEDC=OEDC country
DEVIC=non-OECD country

Exporter Codes

M=Manufacturer
D=Distributor
S=Services
A=Agriculture
etc

Terms of Payment

2 alpha, e g
LC=Letter of Credit
AC=Open Account
DT=Draft
DC=Documentary Collection
PR=Prepayment
etc

5 09 Sister/Daughter Companies
5 10 Global Code

6 00 Products & Markets

6 01 Main Products
6 02 Main Markets
6 03 Sector
6 04 Sub-Sector

7 00 Information Sources

7 01 Blacklistings
7 02 Legal Actions
7 03 Prime Banker
7 04 Banker 2
7 05 Banker 3
7 06 Bankers' Reports
7 07 Total Borrowings

8 00 Short Financial Details

8 01 Total Export Sales
8 02 Total Turn-Over
8 03 Sales/Turn-Over Ratio (Calculated)
8 04 Terms of Payment
8 05 Credit Period Extended

9 00 Financial Statement Details

9 01 Statement Date
9 02 Statement Currency
9 03 Statement Period
9 04 Audit Qualification
9 05 Assets
9 06 Liabilities
9 07 P&L Account
9 08 Financial Ratios

6 01 Main Products
6 02 Main Markets
6 03 Sector
6 04 Sub-Sector

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Ratings & Opinions

10 01 Owner's Experience
10 02 JLGC Credit Score
10 03 External Credit Ratings
10 04 JLGC Credit Opinion
10 05 "Good for " Statement
10 06 General Comments

Credit Periods Extended

days - 3 numeric
e g 30
e g 180

Sector Codes

4 alpha, e g
AGR=Agricultural Products
PHAR=Pharmaceuticals
PLAS=Plastics
DEAD=Dead Sea Products
CRFT=Crafts
etc

10 00 **Ratings & Opinions**

10 01 Owner's Experience

10 02 JLGC Credit Score

10 03 External Credit Ratings

10 04 JLGC Credit Opinion

10 05 "Good for " Statement

10 06 General Comments



The Berne Union

Attachment "B"
International Union
of
Credit and Investment Insurers

Secretariat
35 Old Queen Street
London SW1H 9JA

Telephone (44 171) 799 2990
Telefax (44 171) 799 2991
Internet BU-SEC@DEXNET GEIS COM
U K CALLERS SHOULD USE PREFIX CODES (0171)

LIST OF MEMBERS

AUSTRALIA

(EFIC)

Mailing Address

Export Finance & Insurance Corporation
Level 5, Export House
22 Pitt Street
Sydney N S W 2000

PO Box R65
Royal Exchange N S W 2000

Telephone (61 2) 201 2111
Telefax (61 2) 201 2294
Telex 121224 EFIC AA
Internet rdonn@efic infonet com
WWW http //www efic gov au

AUSTRIA

(OeKB)

Mailing Address

Oesterreichische Kontrollbank
Aktiengesellschaft
Export Guarantee Department/
International Relations & Cover Policy
Am Hof 4
A-1011 Vienna

Postfach 70
A-1011 Vienna

Telephone (43 1) 53127 - 0 or Ext Number
Telefax (43 1) 53127 - 693
Internet sdoritschispp@ocko co at
bsburny@ockb co at
WWW http //www ocko co at

CANADA

(EDC)

Export Development Corporation
151 O'Connor Street
Ottawa
Canada K1A 1K3

Telephone (1 613) 598 2500
Telefax (1 613) 237 2690
Telex 0534136 EXCREDCORP OTT
WWW http //www edc ca

GERMANY

(HERMES)

Mailing Address

Hermes Kreditversicherungs-
Aktiengesellschaft
Friedensallee 254
22763 Hamburg

Postfach
22746 Hamburg

Telephone (49 40) 8834-0
Telefax (49 40) 8834 9175

HONG KONG
Hong Kong Export Credit
Insurance Corporation
South Seas Centre, Tower 1
2nd Floor, 75 Mody Road
Tsimshatsui East
Kowloon

Telephone (852) 2723 3883
Telefax (852) 2722 6277
Telex 56200 HKXC HX
WWW [http //www hkecic com](http://www.hkecic.com)

INDIA (ECGC)

Export Credit Guarantee Corporation
of India Limited
10th Floor, Express Towers
Nariman Point
Bombay 400 021

Telephone (91 22) 202 4852
Telefax (91 22) 204 5253
Telex 1183231 ECGC IN
Internet [ecgces@bom2 vsnl net in](mailto:ecgces@bom2.vsnl.net.in)

ISRAEL (IFTRIC)

The Israel Foreign Trade Risks
Insurance Corporation Ltd
65 Petah Tikva Road
Tel Aviv 61201

Mailing Address

P O Box 20215
65 Petah Tikva Road
Tel Aviv 61201

Telephone (972 3) 563 1777
Telefax (972 3) 561 0313
Telex 341179 IFTI IL
General Internet [iftric@iftric co il](mailto:iftric@iftric.co.il)
Information Dept [inf_dep@iftric co il](mailto:inf_dep@iftric.co.il)

ITALY (SACE)

Sezione Speciale per l'Assicurazione
del Credito all'Esportazione
Piazza Poli 37
00100 Rome

Mailing Address

C P 253 Roma Centro

Telephone (39 6) 67361
Telefax (39 6) 6736225 / 6736270
6736359-Research &
International Relations Dept
Telex 613160 SACE I
WWW [http //www ntr it/SACE](http://www.ntr.it/SACE)

JAMAICA W I (EXIM J)

National Export-Import Bank
of Jamaica Limited
48 Duke Street
Kingston

Mailing Address

P O Box 3
Kingston

Telephone (1 809) 92 29690/9
Telefax (1 809) 92 29184
Telex 3650 EXIMJ JA
Internet [BU-EXIMJ@DEKNET GEIS COM](mailto:BU-EXIMJ@DEKNET.GEIS.COM)

JAPAN

(EID/MITI)

Export-Import Insurance Department
 International Trade Administration Bureau
 Ministry of International
 Trade and Industry
 1-3-1 Kasumigaseki
 Chiyoda-ku
 Tokyo 100

Telephone (81 33) 501 1665
 Telefax (81 33) 508 2624
 Telex 22916 EIDMITI J
 WWW [http //www miti go jp](http://www.miti.go.jp)

KOREA

(KEIC)

Korea Export Insurance Corporation
 33 Seoin-Dong
 Chongro-Ku
 Seoul 110-752

Telephone (82 2) 399 6800
 Telefax (82 2) 399 6577
 WWW [http //keic or kr](http://keic.or.kr)

MALAYSIA

(MECIB)

Malaysia Export Credit Insurance Berhad
 Level 12 & 13, Bangunan Bank Industri
 Jalan Sultan Ismail
 50250 Kuala Lumpur

Mailing Address

P O Box 11048
 50734 Kuala Lumpur

Telephone (60 3) 291 0677
 Telefax (60 3) 291 0353
 Telex 31190 EXCRED MA
 WWW [http //www jaring my/weoworks/mecib](http://www.jaring.my/weoworks/mecib)

MEXICO

(BANCOMEXT)

Banco Nacional de Comercio Exterior S N C
 Camino A Santa Teresa 1679
 3a Planta
 Colonia Jardines del Pedregal
 C P 01900 MEXICO D F

Telephone (52 5) 327 6000
 Telefax (52 5) 327 6157
 327 6187
 Telex 1764393 BNCE ME
 WWW [http //www mexico businessline gov mx](http://www.mexico.businessline.gov.mx)

SOUTH AFRICA

(CGIC)

Credit Guarantee Insurance
 Corporation of Africa Limited
 Credit Guarantee House
 31 Dover Street
 Randburg 2194
 Johannesburg

Mailing Address

P O Box 125
 Randburg 2125

Telephone (27 11) 889 7000
 Telefax (27 11) 886 1027
 886 5715
 Telex 420508SA
 WWW [http //www creditguarantee co za/](http://www.creditguarantee.co.za/)

SLLECIIC

(SLECIIC)

Mailing Address

Sri Lanka Export Credit Insurance Corporation
278/5 Union Place
Colombo 2

P O Box 2213
Colombo 2

Tel (94 1) 42 28 15
43 01 61

Fax (94 1) 44 75 10

Telex 21404 SLECIIC CE

WWW [http //www TradenetSL lk/slecic/slecic.html](http://www.TradenetSL.lk/slecic/slecic.html)

SWEDEN

(EKN)

Mailing Address

Exportkreditnämnden
Kungsgatan 36
Stockholm

Box 3064
S-103 61 Stockholm

Telephone (46 8) 701 00 00

Telefax (46 8) 411 81 49

Telex 17657 EKN S

Internet info@ekn.se

WWW [http //www.ekn.se](http://www.ekn.se)

SWITZERLAND

(ERG)

Mailing Address

Geschäftsstelle für die Exportrisikogarantie
Kirchenweg 8
CH-8032 Zurich

Postfach
CH-8032 Zürich

Telephone (41 1) 384 47 77

Telefax (41 1) 384 47 87

Internet Peter.Silberschmidt@erg.admin.ch

UNITED KINGDOM (ECGD)

Export Credits Guarantee Department
2 Exchange Tower
Harbour Exchange Square
London E14 9GS

Telephone (44 171) 512 7000

Telefax (44 171) 512 7649

Telex 290350 ECGD HQ G

Internet BU-ECGD@DEXNET.GEIS.COM

WWW [http //www open gov uk/ecgd](http://www.open.gov.uk/ecgd)

UNITED KINGDOM (TI)

Trade Indemnity plc
1 Canada Square
London E14 5DX

Telephone (44 171) 729 311

Telefax (44 171) 729 7682

Internet BU-TRADE@DEXNET.GEIS.COM

UNITED STATES OF AMERICA (OPIC)

Overseas Private Investment Corporation
1100 New York Avenue N W
Washington D C 20527

Telephone (1 202) 336 8586
Telefax (1 202) 408 5142
(1 202) 408 9859
WWW <http://www.opic.gov>

UNITED STATES OF AMERICA (EXIMBANK)

Export-Import Bank of the
United States
811 Vermont Avenue, N W
Washington D C 20571

Telephone (1 202) 565 3946
Telefax (1 202) 565 3380
(In-Safe No) 6710607 EXIBANK
Telex 89461 EXIBANK
WWW <http://www.exim.gov>

ZIMBABWE (CREDSURE)

Credit Insurance Zimbabwe Limited
69 Second Street
P O Box CY 1584
Causeway_
Harare

Telephone (263 4) 738944-7
706101-4
Telefax (263 4) 706105
Telex 24424 CREDIT ZW
Internet credsure@mail.pci.co.zw

(MIGA)

Multilateral Investment
Guarantee Agency
12th Floor
1800 G Street, N W
Washington D C
U S A

Mailing Address

1818 H Street, N W
Washington D C 20433

Telephone (1 202) 473 6168
Telefax (1 202) 522 2630
Internet LHOLLYWOOD@WORLDBANK.ORG
WWW <http://www.miga.org>