

# **The Global ePassport & eVisa Industry Report**

## **Market Analysis and Forecasts 2009 to 2014**

**Comprehensive Market Data. Critical Insight. Targeted Revenue Forecasts**

Published  
June 2010

by



© **2010 Acuity Market Intelligence:** All rights reserved. The material contained within this document was created by and is protected under copyright by Acuity MI, LLC. The Author and Publisher make no guarantee on the views, opinions, or forecasts contained herein. No part of this report or the report in its entirety may be reproduced for any reason without explicit consent of Acuity Market Intelligence.



## About Acuity Market Intelligence

**Acuity Market Intelligence** is a leading ID Solutions strategic consultancy. Acuity cuts through the clutter of information overload to provide technology-neutral and vendor-independent analysis for the ID Solutions marketplace and other emerging technology markets. Acuity's established reputation for candid, "hype free" insight is based on a proven record of accurately anticipating market trends. Acuity relies on *rigorous intuition* - a combination of quantifiable, data driven analysis and insight honed over two decades - to consistently provide original, thought provoking, accurate, and reliable analysis.

### Market Development Expertise

Acuity's singular focus is on providing emerging technology market development expertise in the following areas:

- **Market Analysis** – Identification and evaluation of key technological developments, market trends, industry players, and deployment effectiveness.
- **Opportunity Analysis** – Vertical market segmentation and identification, prioritization, and sizing of the most lucrative opportunities for a given product, service, or solution.
- **Solutions Analysis** – Requirements and functional specifications
- **Due Diligence** – Evaluation of market players to ensure:
  - Opportunities have been adequately and accurately assessed.
  - Financial, operational, and strategic plans are in place to create sustainable market viability.
  - Product and service quality can be demonstrated.
- **Strategic Planning** – Creation of highly leveragable plans to develop, evaluate and deploy emerging technology-based solutions with the objective of achieving the highest level of customer satisfaction and sustained market dominance.

### Client Services

Clients leverage Acuity's knowledge and expertise through a range of off-the-shelf, semi-custom, and fully custom product and service offerings. These include:

**Executive Briefings/Strategy Sessions** – Interactive sessions provide targeted insight to Executives.

**Consulting** – Custom projects designed to support specific Client objectives.

**Segment Tracking** – On-going coverage of technologies, players, market drivers and dynamics of a particular industry sector or technology marketplace.

**Reports** – Periodic and one-off targeted analyses focused on a range of topics including: technology evolution, application development, vertical market adoption, opportunity and competitive analyses.

**Research** – Standard and custom research projects designed to address specific knowledge gaps.

**Workshops** – One-to-two day intensives presenting Acuity's proprietary methodology for applying proven tools and techniques to identify, prioritize, and size market opportunities.

Please contact **Acuity Market Intelligence** for additional information on services, availability, and fee structures.

|        |                    |
|--------|--------------------|
| Online | www.acuity-mi.com  |
| Phone  | +1 303 449 1897    |
| Email  | info@acuity-mi.com |



## Report Overview

- Scope:** This report presents unique insight into the worldwide opportunity for the development of secure biometrically-enabled passport and visa documents. The current state of the market is evaluated in terms of how this market will likely evolve and where the most lucrative opportunities will be. This comprehensive report offers unbiased critical perspective and previously unpublished data and statistics on the ePassport and eVisa marketplace.
- OBJECTIVE:** Provide the basis for short-term, mid-range, and long-term strategic planning for technology and solution development, market investment, and phased adoption of ePassport and eVisa solutions.
- AUDIENCE:** Individuals responsible for strategic planning, business and market development, and sales related to ePassport and eVisa initiatives including vendors, integrators, investors, consultants, solution providers, and public sector staff responsible for developing and implementing ePassport and eVisa policies and programs.
- METHODOLOGY:** Analysis is drawn from significant market and technical developments, tests, pilots and deployments, public domain and private data sources, research and reports, surveys, and interviews with vendors, integrators, intermediaries, customers, privacy and civil liberties advocates, and other relevant technology and leading industry experts. Forecasts are derived from modeling market opportunities based on public domain and proprietary primary data and secondary data sources and are flexibly structured to account for known and predictive factors. Primary data determines known model data. These include data points like population, annual passports issued, program costs, and the number and type of visas issued. Models are adjusted to account for market conditions, current deployments, anticipated projects, and existing and planned infrastructure. Conservative assumptions for predictive factors such as technology pricing and anticipated adoption rates are introduced to determine forecasts.
- KEY CONCLUSION:** The ongoing development and production of secure ePassport and eVisa infrastructures will provide sustainable market opportunities as countries stabilize existing programs, continually incorporate new document and IT security features, update and replace aging equipment, and re-issue documents and reengineer processes in five to ten year cycles. By 2014, the deployment of a secure global border crossing infrastructure that leverages the proliferation of ePassports and eVisas will begin in earnest. With an emphasis on automated self-service verification of documents and identity and global data exchange, there will be increasing efforts to integrate global systems that process ePassports and eVisas so that any given automated solution can process any ePassport holder with or without an accompanying eVisa. In this way the imminent global travel and border control transformation will both be driven by and drive ePassport and eVisa market evolution.
- COPYRIGHT AND LICENSE:** This report was created by Acuity Market Intelligence for use that is consistent with the purchased license. The purchasing party is expressly prohibited from reproducing and/or distributing this document electronically or in print for any reason beyond those specified in the purchased license agreement. The purchasing party may reproduce and use excerpts from this report for internal purposes provided that material is attributed to Acuity Market Intelligence and that excerpts do not substantially represent complete sections of the report or the report in its entirety. This copyright will be strictly enforced.
- AUTHORS:** C. Maxine Most, Principal, Acuity Market Intelligence  
Rudie Lion, Principal, Acuity Market Intelligence



## Preface

June 2010

EPassports and eVisas are poised to fundamentally change world travel by delivering on the promise to create a secure, consistent, and far more reliable global identification infrastructure. The markets for ePassports and eVisas (those that incorporate biometrics) are large, complex and difficult to quantify. These marketplaces include the enrollment, credentialing, and verification processes as well as solutions integration and the associated physical and logical technology and infrastructure required to deploy and leverage biometric passports and visas. Requirements and processes differ from country to country, employ various levels of automation, and may or may not be integrated with local and regionally based border control and facilitation systems.

Almost all of Europe has or will have ePassports by 2010, about 16 African countries have or will have them shortly, the United States is issuing ePassports, and Canada will by 2011. In addition, Japan, Korea, Singapore, Australia and New Zealand are also issuing ePassports. Altogether, at least 90 countries worldwide will be offering ePassports by the end of 2010 with 105 set to adopt by the end of 2014. With Western Europe's rapid current and planned adoption of ePassports and eVisas, emphasis has been shifting to Eastern Europe, the Middle East and Africa. Asia, with its vast population and sustained economic growth will surpass Europe in number of ePassports issued by 2014.

The visa situation is not as clear. The UK, Sweden, Norway, France, Germany, Belgium, Luxembourg, Lithuania have biometric eVisa programs. Saudi Arabia is currently identifying an outsourcing partner for producing eVisas and many other nations are in various stages of defining, evaluating or beginning to deploy biometric eVisas. US-VISIT, while not purely an eVisa program, incorporates biometric visas as part of its overall approach to biometric-based border control and has become an international



model for border screening. Japan, South Korea and most recently Indonesia have adopted similar border screening programs but have yet to incorporate biometric visas into their processes.

The vendor ecosystem is equally large and complex and clear value chains have yet to be defined. Almost without exception, every vendor in the marketplace claims they have the “leading solution” for passports, visas, and/or border control, that their approach or methodology is the best, and that their key areas of focus are the most critical. Competition for every procurement is intense and in this environment, claims of “market leadership”, particularly in terms of technology performance, are not verifiable, let alone useful in most cases. Demonstrated capability, high degrees of customer satisfaction, and a willingness to provide a platform for continuous innovation are critical in defining the market in favorable terms that suit a particular vendor or solution approach.

Regardless of adoption status on a country-by-country basis, ePassports and eVisas are becoming commonplace and these markets will provide sustainable revenue. While the cost and complexity of deployments will remain a significant obstacle for small and developing nations, investment and expertise provided by larger, wealthier states that have a vested interest in securing the global travel infrastructure will address this market gap. Even for those countries that have fully deployed programs, sustained revenues associated with lifecycle upgrades, updates, and security enhancements will be substantial. In addition, as more document and biometric readers and automated border control solutions are deployed, technology and process interoperability will become a reality and aggressive border system updates, upgrades, and replacements will become mainstream and provide more predictable, stable market dynamics that promise significant on-going opportunities.

Over the past few years, Acuity has had consistent, ongoing requests for insight into the dynamics and specific opportunities in this marketplace. The most sought after



research in this highly competitive marketplace has been concrete data on country specific adoption, opportunity sizing including credential volumes and issuing locations, planned procurements, actual and projected expenditures/revenues, and vendor positioning and deployments. To date, this type of data has existed only in bits and pieces, if at all, and prohibitively expensive and time consuming to aggregate.

*The Global ePassport and eVisa Industry Report* is Acuity's initial response to this market demand. This report is the first in a series that will provide the kind of hard data, "hype free" insight, meaningful analysis, and believable forecasts that provide critical support to the healthy evolution of the identification solution industry.

Cheers,

C. Maxine Most  
max@acuity-mi.com

Rudie Lion  
rudie@acuity-mi.com



## Introduction

*The Global ePassport and eVisa Industry Report* is a data driven analysis of the state of the market for these two critical biometric based travel credentials. The report relies extensively on primary sourced data (which for the purposes of this report is defined as quantitative data obtained from sources directly tabulating or producing this data), and on secondary sourced data from trusted sources. The report then leverages model-derived forecasts to present a comprehensive view of these markets. Data acquired, modeled, and forecast includes the number of credentials issued, the distribution of biometrics enrollment and verification units and ePassport document readers, the value and projected growth of the markets, as well as key solution components and technology forecasts.

## Definitions

For the purposes of this report, the following definitions apply:

EPassport: A combined paper and electronic travel document used to authenticate the identity of travelers that incorporates a contactless IC “smart” chip and biometrics, supports a combination of electronic and optical security features including watermarks, optically variable devices, and holograms, and securely stores the personally identifiable information printed on the document and enrolled biometric data.

EVisa: The electronic authorization and credentialing process for granting temporary access to a country for a specified purpose for a specified period that relies on biometrics to establish and confirm identity.

## Methodology

A combination of primary sourced data and model based projected data was used to develop the forecasts and analysis included in this report. Primary data acquired directly through government agencies and well-credentialed non-governmental agencies



was presumed valid. Data acquired through sources with less qualified credentials or with strong motivation for particular outcomes was validated through additional sources and/or model based alternatives.

### **Data and Data Acquisition**

Primary data used to complete the analysis and develop forecasts for this report includes passport and visa volumes, population levels and growth, number and location of border crossing points, diplomatic missions and consulates, domestic passport enrollment centers, existing technology pilots and deployments, as well as budgetary allocations and reported costs for relevant programs, and units and value of deployed technology.

Primary data was obtained directly from government agencies such as Departments of Immigration, Interior, State, Homeland Security, Foreign Ministries, and Audit and Accountability Offices. Additional data was sourced from non-governmental agencies tasked with providing domestic and global insight into population, immigration, passenger travel, border management, and government expenditures. Source materials include online data and databases, published statistics, policy papers, budgets, and program analyses, public statements, press releases, and direct consultation.

Finally, data was obtained through publicly available information from, statements by, and direct consultation with civil servants, consultants, vendors, integrators, analysts, and other third parties directly involved or with direct knowledge of specific relevant programs and deployments. In some cases, these third parties provided confirmation of the accuracy of data obtained from sources deemed to require validation.

### **Model Development**

Models were developed to project specific data for countries where primary data was unavailable from government or non-government sources. The modeled projections use known data such as population, geographic size, and visitor arrivals as a basis for determining unknown values by referencing global statistics and those from similar



countries or regions where primary data is available. These projections are adjusted to account for regional indicators and variations such as political and social stability, levels of development, financial performance and stability, as well as other country or region specific indicators or influencers. Models are also adjusted to account for existing market conditions, current deployments, anticipated projects, and existing and planned infrastructure. Conservative assumptions for predictive factors such as technology pricing and anticipated adoption rates are introduced to determine forecasts.

Once primary sourced or projected data was available for all relevant countries, forecast models were designed to project unit volumes of passports, visas, and the related technologies covered in this report - biometrics, document readers, credentials, and smart chips for all countries adopting ePassports and eVisa. Revenue forecasts were then developed based on these complete primary sourced and projected data sets.

### **Benchmark Analysis**

In the process of data acquisition, data projection, and market forecasts, certain consistent measures of deployment and adoption levels, service expectations and performance, and operational costs emerged. An assessment of these measures has been included in the report as a Benchmark Analysis that provide reference points for implementing new ePassport and eVisa programs or evaluating exiting ones.

### **Country Profiles**

Each of the 105 countries that currently has or will have a biometric-based ePassport program in place by the end of 2014, that are issuing eVisas, or that simply use inspection equipment to verify ePassports, is profiled in a one page overview. These overviews provide details about ePassport and eVisa (if deployed or planned to be deployed by 2014) programs including the year the program was initiated, types of biometric(s) used, annual volumes and revenue, numbers in circulation, validity, next procurement, and number of domestic and off-shore issuing locations.



## Market Analysis

Analysis is drawn from significant market and technical developments, tests, pilots and deployments, public domain and private data sources, research and reports, surveys, and interviews with vendors, integrators, intermediaries, customers, privacy and civil liberties advocates, and other relevant technology and leading industry experts. Critical data and key implications drawn from the primary data and forecasts are filtered through this knowledge base and presented from both a policy and planning perspective as well as from an opportunity assessment and market value perspective.

## Forecasts

The final section of the report presents adoption and revenue forecast data globally, regionally, by solutions components and technologies. The forecasts have been developed through a rigorous process relying on the best available and or projected data. As with all market forecasts, the most significant indicator is the scale of the projections not the precise numbers. Furthermore, where assumptions were required to calculate forecasts, the underlying principal was to rely on conservative rather than aggressive estimates. In this way, ***the report offers a conservative market forecast baseline indicating the scale of opportunity expected over the next five years.***

Because of the complex nature of the ePassport and eVisa markets and the associated complexity involved in modeling data and forecasting revenues, *it is critical that the methodology, assumptions, and model notes in the forecast section be reviewed to gain relevant insight from the data.* Additional information is provided in the report in specific sections to reinforce the underlying assumptions where deemed necessary.



## Table of Contents

|   |           |
|---|-----------|
| About Acuity Market Intelligence .....                                      | i         |
| Report Overview .....   | ii        |
| Preface .....   | iii       |
| Introduction .....  | vi        |
| Definitions.....  | vi        |
| Methodology .....   | vi        |
| Data and Data Acquisition.....  | vii       |
| Model Development .....   | vii       |
| Benchmark Analysis .....  | viii      |
| Country Profiles .....  | viii      |
| Market Analysis .....   | ix        |
| Forecasts .....   | ix        |
| Table of Contents .....   | x         |
| Table of Figures.....   | xvi       |
| <b>Executive Summary .....</b>  | <b>1</b>  |
| 1. The ePassport and eVisa Marketplace .....                                | 2         |
| Market for EPassports and EVisas to Reach Nearly \$11 Billion by 2014 ..... | 2         |
| Worldwide EPassport Volume to Reach Near Full Adoption .....                | 3         |
| EVisa Market Growth Rate Stronger than EPassport .....                      | 5         |
| Wide Divergence in Infrastructure Requirements .....                        | 6         |
| Enrollment.....   | 6         |
| Data Management.....  | 7         |
| Credentialing .....   | 7         |
| Verification .....  | 8         |
| Integration .....   | 9         |
| Biometrics at Enrollment Continues to Expand.....                           | 9         |
| Uptake of Passport Readers Dependent on Location and Use-Scenario .....     | 11        |
| Smart Chipsets and Biometrics Shift Industry Dynamics .....                 | 11        |
| Tipping Point for System-Wide Adoption within Reach.....                    | 12        |
| Key Findings and Implications.....  | 13        |
| <b>Market Analysis .....</b>  | <b>15</b> |
| 2. State of the Market.....   | 16        |
| 2.1 Market Adoption and Sizing.....   | 16        |
| 2.1.1 EPassport Market.....   | 20        |
| 2.1.2 EVisa Market.....   | 23        |
| 2.2 Critical Market Drivers.....  | 25        |
| 2.4 Marketplace Evolution.....  | 30        |
| 2.5 Key Vendors .....   | 32        |
| 3. Solutions Overview .....   | 38        |
| 3.1 Critical Components.....  | 38        |
| 3.1.1 Enrollment .....  | 40        |
| 3.1.2 Data Management.....  | 41        |



|   |           |
|---|-----------|
| 3.1.3 Credentialing.....                          | 42        |
| 3.1.4 Verification.....                           | 43        |
| 3.1.5 Solutions Integration .....                 | 44        |
| 3.2 Technology.....                               | 45        |
| 3.2.1 Biometrics.....                             | 46        |
| 3.2.2 Document Readers .....                      | 47        |
| 3.2.3 Secure Credentials and Smart Chipsets ..... | 50        |
| 3.3 Human Factors Considerations .....            | 51        |
| 4. Benchmark Analysis .....                       | 55        |
| 4.1 Market Sizing Benchmarks .....                | 56        |
| 4.2 Service Level Benchmarks .....                | 57        |
| 4.2.1 ePassport Issuance.....                     | 57        |
| 4.2.2 eVisa Issuance .....                        | 59        |
| 4.3 Operational Benchmarks .....                  | 60        |
| 5. Passport and Visa Data by County .....         | 62        |
| 5.1 EPassport Country Overview .....              | 63        |
| 5.2 EVisa Country Overview .....                  | 65        |
| <b>Country Profiles .....</b>                     | <b>71</b> |
| Albania .....                                     | 72        |
| Algeria .....                                     | 73        |
| Andorra .....                                     | 74        |
| Angola .....                                      | 75        |
| Argentina .....                                   | 76        |
| Armenia .....                                     | 77        |
| Aruba .....                                       | 78        |
| Australia .....                                   | 79        |
| Austria .....                                     | 80        |
| Azerbaijan.....                                   | 81        |
| Bahamas, The .....                                | 82        |
| Bahrain .....                                     | 83        |
| Bangladesh .....                                  | 84        |
| Barbados.....                                     | 85        |
| Belarus .....                                     | 86        |
| Belgium .....                                     | 87        |
| Bermuda.....                                      | 88        |
| Bosnia and Herzegovina .....                      | 89        |
| Botswana.....                                     | 90        |
| Brazil .....                                      | 91        |
| Brunei.....                                       | 92        |
| Bulgaria .....                                    | 93        |
| Cambodia.....                                     | 94        |
| Canada .....                                      | 95        |
| Cape Verde .....                                  | 96        |
| Chile.....  | 97        |
| China .....                                       | 98        |
| Colombia.....                                     | 99        |
| Congo, Democratic Republic .....                  | 100       |



|                             |     |
|-----------------------------|-----|
| Costa Rica.....             | 101 |
| Côte d'Ivoire.....          | 102 |
| Croatia.....                | 103 |
| Cyprus.....                 | 104 |
| Czech Republic.....         | 105 |
| Denmark.....                | 106 |
| Dominican Republic.....     | 107 |
| Egypt.....                  | 108 |
| Estonia.....                | 109 |
| Fiji.....                   | 110 |
| Finland.....                | 111 |
| France.....                 | 112 |
| Gambia, The.....            | 113 |
| Georgia.....                | 114 |
| Germany.....                | 115 |
| Ghana.....                  | 116 |
| Greece.....                 | 117 |
| Hong Kong.....              | 118 |
| Hungary.....                | 119 |
| Iceland.....                | 120 |
| India.....                  | 121 |
| Indonesia.....              | 122 |
| Iran.....                   | 123 |
| Ireland.....                | 124 |
| Israel.....                 | 125 |
| Italy.....                  | 126 |
| Jamaica.....                | 127 |
| Japan.....                  | 128 |
| Kazakhstan.....             | 129 |
| Kenya.....                  | 130 |
| Korea, South.....           | 131 |
| Kosovo.....                 | 132 |
| Kuwait.....                 | 133 |
| Kyrgyzstan.....             | 134 |
| Latvia.....                 | 135 |
| Lebanon.....                | 136 |
| Liberia.....                | 137 |
| Libya.....                  | 138 |
| Liechtenstein.....          | 139 |
| Lithuania.....              | 140 |
| Luxembourg.....             | 141 |
| Macau.....                  | 142 |
| Macedonia, Republic of..... | 143 |
| Madagascar.....             | 144 |
| Malaysia.....               | 145 |
| Maldives.....               | 146 |
| Malta.....                  | 147 |
| Mexico.....                 | 148 |



|                            |     |
|----------------------------|-----|
| Moldova .....              | 149 |
| Monaco .....               | 150 |
| Montenegro .....           | 151 |
| Morocco .....              | 152 |
| Mozambique .....           | 153 |
| Nepal .....                | 154 |
| Netherlands .....          | 155 |
| Netherlands Antilles ..... | 156 |
| New Zealand .....          | 157 |
| Nigeria .....              | 158 |
| Norway .....               | 159 |
| Oman .....                 | 160 |
| Pakistan .....             | 161 |
| Peru .....                 | 162 |
| Philippines .....          | 163 |
| Poland .....               | 164 |
| Portugal .....             | 165 |
| Puerto Rico .....          | 166 |
| Qatar .....                | 167 |
| Romania .....              | 168 |
| Russia .....               | 169 |
| San Marino .....           | 170 |
| Saudi Arabia .....         | 171 |
| Senegal .....              | 172 |
| Serbia .....               | 173 |
| Singapore .....            | 174 |
| Slovakia .....             | 175 |
| Slovenia .....             | 176 |
| South Africa .....         | 177 |
| Spain .....                | 178 |
| Sudan .....                | 179 |
| Sweden .....               | 180 |
| Switzerland .....          | 181 |
| Taiwan .....               | 182 |
| Tajikistan .....           | 183 |
| Thailand .....             | 184 |
| Togo .....                 | 185 |
| Tunisia .....              | 186 |
| Turkey .....               | 187 |
| Turkmenistan .....         | 188 |
| Ukraine .....              | 189 |
| United Arab Emirates ..... | 190 |
| United Kingdom .....       | 191 |
| United States .....        | 192 |
| Uzbekistan .....           | 193 |
| Venezuela .....            | 194 |
| Vietnam .....              | 195 |



|   |            |
|---|------------|
| <b>Adoption and Revenue Forecasts .....</b>             | <b>196</b> |
| 6. Forecast Methodology and Assumptions .....           | 197        |
| 6.1 Methodology .....                                   | 197        |
| 6.2 Assumptions and Notes.....                          | 199        |
| 7. Adoption Forecasts .....                             | 202        |
| 7.1 Global ePassport and eVisa Adoption .....           | 202        |
| 7.1.1 EPassport Adoption.....                           | 202        |
| 7.1.2 EVisa Adoption .....                              | 207        |
| 7.2 Regional ePassport Adoption .....                   | 210        |
| 7.2.1 EPassport Adoption by Region .....                | 210        |
| 7.2.2 Africa.....                                       | 212        |
| 7.2.3 Asia .....  | 213        |
| 7.2.4 Caribbean .....                                   | 214        |
| 7.2.5 Europe.....                                       | 214        |
| 7.2.6 Middle East .....                                 | 215        |
| 7.2.7 North America .....                               | 216        |
| 7.2.8 Pacific.....                                      | 217        |
| 7.2.9 South America.....                                | 217        |
| 7.3 Regional eVisa Adoption.....                        | 219        |
| 7.3.1 EVisa Adoption by Region .....                    | 219        |
| 7.3.2 Africa.....                                       | 221        |
| 7.3.3 Asia .....  | 221        |
| 7.3.4 Caribbean .....                                   | 222        |
| 7.3.5 Europe.....                                       | 222        |
| 7.3.6 Middle East .....                                 | 223        |
| 7.3.7 North America .....                               | 223        |
| 7.3.8 Pacific.....                                      | 224        |
| 7.3.9 South America.....                                | 225        |
| 8. Global ePassports and eVisas Revenue Forecasts ..... | 226        |
| 8.1 Global Combined EPassport and EVisa Revenues.....   | 226        |
| 8.1.1 Regional .....                                    | 227        |
| 8.1.2 Solution Components.....                          | 230        |
| 8.1.3 Technology .....                                  | 231        |
| 8.2 Global ePassport Revenues .....                     | 232        |
| 8.2.1 Regional .....                                    | 233        |
| 8.2.2 Solution Components.....                          | 235        |
| 8.2.3 Technology .....                                  | 236        |
| 8.3 Global eVisa Revenues.....                          | 238        |
| 8.3.1 Regional .....                                    | 238        |
| 8.3.2 Solution Components.....                          | 240        |
| 8.3.3 Technology .....                                  | 241        |
| 8.4 Regional ePassport and eVisa Revenues.....          | 243        |
| 8.4.1 Africa Regional Forecasts .....                   | 243        |
| 8.4.2 Asia Regional Forecast.....                       | 247        |
| 8.4.3 Caribbean Regional Forecast .....                 | 251        |
| 8.4.4 Europe Regional Forecasts .....                   | 254        |
| 8.4.5 Middle East Regional Forecasts.....               | 259        |
| 8.4.6 North America Regional Forecasts .....            | 263        |
| 8.4.7 Pacific Regional Forecasts .....                  | 266        |
| 8.4.8 South America Regional Forecasts .....            | 269        |



**Report Findings..... 272**

- 9. Key Findings and Implications .....273
  - The Market for EPassports and EVisas are Expanding Rapidly .....273
  - EPassport and EVisa Usage Reaches Critical Tipping Point by 2014 .....273
  - Highest Growth Rate Expected for Enrollment and Verification Components.....273
  - Market Evolves Towards Increased Automation of Border Control Processing .....274
  - The Future .....275
  - Final Thoughts.....275



## Table of Figures

|   |     |
|---|-----|
| Figure 1-1: Global ePassport and eVisa Marketplace Revenue Chart .....                          | 3   |
| Figure 1-2: Global ePassport Market Growth Chart .....  | 4   |
| Figure 1-3: Global ePassport Unit Adoption Table.....   | 4   |
| Figure 1-4: Global eVisa Market Growth Chart.....   | 5   |
| Figure 1-5: Global eVisa Unit Adoption Table .....  | 5   |
| Figure 1-6: Global ePassport Biometrics Live Capture at Enrollment Adoption Unit Table .....    | 10  |
| Figure 1-7: Global Standalone ePassport Reader Adoption Unit Table.....                         | 11  |
| Figure 1-8: Global ePassport eGate Adoption Unit Table.....                                     | 12  |
| Figure 2-1: Global ePassport and eVisa Marketplace Revenue Chart .....                          | 17  |
| Figure 2-2: Global ePassport and eVisa Revenue Market Share by Region 2009 and 2010 Chart ..... | 17  |
| Figure 2-3: Global ePassport and eVisa Combined CAGR Table .....                                | 18  |
| Figure 2-4: Global ePassport and eVisa Revenue by Region Chart .....                            | 18  |
| Figure 2-5: Global ePassport Market Growth Chart.....   | 21  |
| Figure 2-6: Global ePassport Revenue by Region 2009 – 2010 Chart.....                           | 22  |
| Figure 2-7: Global ePassport Adoption Unit Table.....   | 22  |
| Figure 2-8: Global eVisa Market Growth Chart.....   | 23  |
| Figure 2-9: Global eVisa Adoption Unit Table .....  | 24  |
| Figure 2-10: Global eVisa Revenue by Region 2009 – 2014 Chart.....                              | 24  |
| Figure 2-11: Vendor Category Segmentation Chart .....   | 32  |
| Figure 2-12: Vendor Overview Chart .....  | 36  |
| Figure 3-1: Solution Components Definitions Table .....   | 38  |
| Figure 3-2: Global ePassport and eVisa Solution Component Revenue Table.....                    | 39  |
| Figure 3-3: Global ePassport and eVisa Solution Component Revenue Chart .....                   | 39  |
| Figure 3-4: Technology Definitions Table.....   | 45  |
| Figure 3-5: Global ePassport and eVisa Technology Revenue Table.....                            | 46  |
| Figure 3-6: Global ePassport and eVisa Technology Revenue Chart.....                            | 46  |
| Figure 3-7: EPassport Reader Market Segments.....   | 47  |
| Figure 3-8: Total Addressable Market for ePassport Readers.....                                 | 48  |
| Figure 3-9: Deployed ePassport Readers by Unit and Percent 2009.....                            | 49  |
| Figure 3-10: Forecast ePassport Readers by Unit and Percent 2014 .....                          | 50  |
| Figure 4-1: Benchmarks Defined Table.....   | 56  |
| Figure 4-2: Border Processing Capacity Benchmark Table.....                                     | 57  |
| Figure 4-3: Citizen ePassport Service Benchmark Table .....                                     | 58  |
| Figure 4-4: Domestic Geographic Issuance Coverage Benchmark Table.....                          | 58  |
| Figure 4-5: Visa Application Intensity Benchmark Table.....                                     | 59  |
| Figure 4-6: EPassport Control Efficiency Benchmark I Table .....                                | 61  |
| Figure 5-1: EPassport Issuing Countries Overview Table.....                                     | 65  |
| Figure 5-2: Visa Issuance Countries Overview Table.....   | 71  |
| Figure 7-1: Global ePassport Unit Adoption Table.....   | 202 |
| Figure 7-2: Global ePassport Unit Adoption Chart.....   | 203 |
| Figure 7-3: Global ePassport Live Capture Adoption Chart .....                                  | 203 |
| Figure 7-4: Global ePassport Readers Adoption Chart.....  | 203 |
| Figure 7-5: Global ePassport eGates Adoption Chart.....   | 204 |
| Figure 7-6: Global ePassport Issuance and Circulation Table.....                                | 204 |
| Figure 7-7: Global ePassport Issuance Adoption Chart.....                                       | 204 |
| Figure 7-8: Global ePassport Circulation Adoption Chart .....                                   | 205 |
| Figure 7-9: Global ePassport Live Capture Adoption Table .....                                  | 205 |
| Figure 7-10: Global ePassport Enrollment Live Capture Country Adoption Chart .....              | 205 |
| Figure 7-11: Global ePassport Enrollment Live Capture at Unit Adoption Chart.....               | 206 |
| Figure 7-12: Global ePassport Standalone Document Reader Adoption Table .....                   | 206 |
| Figure 7-13: Global ePassport Standalone Document Reader Adoption Chart .....                   | 206 |



|  |     |
|--|-----|
| Figure 7-14: Global eVisa Issued Unit Adoption Table.....                      | 207 |
| Figure 7-15: Global eVisa Issued Unit Adoption Chart.....                      | 207 |
| Figure 7-16: Global eVisa Live Capture Unit Adoption Chart.....                | 208 |
| Figure 7-17: Global eVisa Application Adoption Table.....                      | 208 |
| Figure 7-18: Global eVisa Application Adoption Chart.....                      | 209 |
| Figure 7-19: Regional ePassport Unit Adoption Table.....                       | 210 |
| Figure 7-20: EPassport Unit Market Share by Region 2009.....                   | 211 |
| Figure 7-21: Global ePassport Biometric Live Capture Units Adoption Table..... | 211 |
| Figure 7-22: Global ePassport Document Readers Units Adoption Table.....       | 212 |
| Figure 7-23: Global ePassport eGates Units Adoption Table.....                 | 212 |
| Figure 7-24: Africa ePassport Market Unit Adoption Table.....                  | 212 |
| Figure 7-25: Africa ePassport Adoption Table.....                              | 213 |
| Figure 7-26: Asia ePassport Market Unit Adoption Table.....                    | 213 |
| Figure 7-27: Asia ePassport Adoption Table.....                                | 213 |
| Figure 7-28: Caribbean ePassport Market Unit Adoption Table.....               | 214 |
| Figure 7-29: Caribbean ePassport Adoption Table.....                           | 214 |
| Figure 7-30: Europe ePassport Market Unit Adoption Table.....                  | 215 |
| Figure 7-31: Europe ePassport Adoption Table.....                              | 215 |
| Figure 7-32: Middle East ePassport Market Unit Adoption Table.....             | 215 |
| Figure 7-33: Middle East ePassport Adoption Table.....                         | 215 |
| Figure 7-34: North America ePassport Market Unit Adoption Table.....           | 216 |
| Figure 7-35: North America ePassport Adoption Table.....                       | 216 |
| Figure 7-36: Pacific ePassport Market Unit Adoption Table.....                 | 217 |
| Figure 7-37: Pacific ePassport Adoption Table.....                             | 217 |
| Figure 7-38: South America ePassport Market Unit Adoption Table.....           | 217 |
| Figure 7-39: South America ePassport Adoption Table.....                       | 218 |
| Figure 7-40: Regional eVisa Unit Adoption Table.....                           | 219 |
| Figure 7-41: EVisa Unit Share by Region 2009.....                              | 219 |
| Figure 7-42: EVisa Unit Share by Region 2014.....                              | 220 |
| Figure 7-43: Global eVisa Biometric Live Capture Units Adoption Table.....     | 220 |
| Figure 7-44: Global eVisa Verification Capture Units Adoption Table.....       | 220 |
| Figure 7-45: Africa eVisa Unit Adoption Table.....                             | 221 |
| Figure 7-46: Africa eVisa Adoption Table.....                                  | 221 |
| Figure 7-47: Asia eVisa Unit Adoption Table.....                               | 221 |
| Figure 7-48: Asia eVisa Adoption Table.....                                    | 222 |
| Figure 7-49: Caribbean eVisa Unit Adoption Table.....                          | 222 |
| Figure 7-50: Caribbean eVisa Adoption Table.....                               | 222 |
| Figure 7-51: Europe eVisa Unit Adoption Table.....                             | 223 |
| Figure 7-52: Europe eVisa Adoption Table.....                                  | 223 |
| Figure 7-53: Middle East eVisa Unit Adoption Table.....                        | 223 |
| Figure 7-54: Middle East eVisa Adoption Table.....                             | 223 |
| Figure 7-55: North America eVisa Unit Adoption Table.....                      | 224 |
| Figure 7-56: North America eVisa Adoption Table.....                           | 224 |
| Figure 7-57: Pacific eVisa Unit Adoption Table.....                            | 224 |
| Figure 7-58: Pacific eVisa Adoption Table.....                                 | 224 |
| Figure 7-59: South America eVisa Unit Adoption Table.....                      | 225 |
| Figure 7-60: South America eVisa Adoption Table.....                           | 225 |
| Figure 8-1: Global ePassport and eVisa Combined Revenue Table.....             | 226 |
| Figure 8-2: Global ePassport and eVisa Percent of Combined Revenue Table.....  | 226 |
| Figure 8-3: Global ePassport and eVisa Percent of Combined Revenue Chart.....  | 227 |
| Figure 8-4: Global ePassport and eVisa Combined Revenue by Region Table.....   | 228 |
| Figure 8-5: Global ePassport and eVisa Combined Revenue by Region Chart.....   | 228 |
| Figure 8-6: Global ePassport and eVisa Combined CAGR by Region Table.....      | 228 |



|   |     |
|---|-----|
| Figure 8-7: Global ePassport and eVisa Combined Revenue Market Share 2009 Chart .....     | 229 |
| Figure 8-8: Global ePassport and eVisa Combined Revenue Market Share 2014 Chart .....     | 229 |
| Figure 8-9: Global ePassport and eVisa Combined Solutions Components Revenue Table .....  | 230 |
| Figure 8-10: Global ePassport and eVisa Combined Solutions Components Revenue Chart ..... | 230 |
| Figure 8-11: Global ePassport and eVisa Combined Solution Components CAGR Table .....     | 231 |
| Figure 8-12: Global ePassport and eVisa Combined Technology Revenue Table .....           | 231 |
| Figure 8-13: Global ePassport and eVisa Combined Technology Revenue Chart .....           | 231 |
| Figure 8-14: Global ePassport and eVisa Combined Revenue by Technology Chart.....         | 232 |
| Figure 8-15: Global ePassport Revenue Chart .....   | 233 |
| Figure 8-16: Global ePassport Revenues by Region Table.....                               | 233 |
| Figure 8-17: Global ePassport CAGR by Region Table.....                                   | 233 |
| Figure 8-18: Global ePassport Revenue Market Share by Region 2009 Chart.....              | 234 |
| Figure 8-19: Global ePassport Revenue Market Share by Region 2014 Chart.....              | 234 |
| Figure 8-20: Global ePassport Market Share by Region 2009 – 2014 Chart .....              | 235 |
| Figure 8-21: Global ePassport Solutions Components Revenue Table .....                    | 235 |
| Figure 8-22: Global ePassport eGate Revenue Table .....                                   | 236 |
| Figure 8-23: Global ePassport Solution Component Revenue Chart .....                      | 236 |
| Figure 8-24: Global Passport Technology Revenue Table .....                               | 237 |
| Figure 8-25: Global Passport Technology Revenue Percent Table.....                        | 237 |
| Figure 8-26: Global Passport Technology Revenue 2009 – 2014 Chart.....                    | 237 |
| Figure 8-27: Global eVisa Revenue Chart.....  | 238 |
| Figure 8-28: Global eVisa Revenue by Region Table.....                                    | 238 |
| Figure 8-29: Global eVisa CAGR by Region Table .....                                      | 239 |
| Figure 8-30: Global eVisa Market Share by Region 2009 Chart .....                         | 239 |
| Figure 8-31: Global eVisa Market Share by Region 2014 Chart .....                         | 239 |
| Figure 8-32: Global eVisa Market Share by Region 2009 - 2014 Chart .....                  | 240 |
| Figure 8-33: Global eVisa Solution Component Table.....                                   | 240 |
| Figure 8-34: Global eVisa Solution Components Chart .....                                 | 241 |
| Figure 8-35: Global eVisa Technology Revenue Table.....                                   | 241 |
| Figure 8-36: Global eVisa Technology Revenue Chart.....                                   | 242 |
| Figure 8-37: Africa ePassport Revenue Chart .....   | 243 |
| Figure 8-38: Africa ePassport Revenue by Country Table.....                               | 244 |
| Figure 8-39: Africa ePassport Solution Component Revenue Table .....                      | 244 |
| Figure 8-40: Africa ePassport Technology Revenue Table .....                              | 245 |
| Figure 8-41: Africa eVisa Revenue Chart.....  | 245 |
| Figure 8-42: Africa eVisa Revenue Chart.....  | 245 |
| Figure 8-43: Africa eVisa Revenue by Country Table .....                                  | 245 |
| Figure 8-44: Africa eVisa Solution Component Revenue Table.....                           | 246 |
| Figure 8-45: Africa eVisa Technology Revenue Table.....                                   | 246 |
| Figure 8-46: Asia ePassport Revenue Chart .....   | 247 |
| Figure 8-47: Asia ePassport Revenue by Country Table .....                                | 248 |
| Figure 8-48: Asia ePassport Solution Component Revenue Table .....                        | 248 |
| Figure 8-49: Asia ePassport Technology Revenue Table .....                                | 249 |
| Figure 8-50: Asia eVisa Revenue Chart.....  | 249 |
| Figure 8-51: Asia eVisa Revenue by Country Table.....                                     | 249 |
| Figure 8-52: Asia eVisa Solution Component Revenue Table .....                            | 250 |
| Figure 8-53: Asia eVisa Technology Revenue Table.....                                     | 250 |
| Figure 8-54: Caribbean ePassport Revenue Chart.....                                       | 251 |
| Figure 8-55: Caribbean ePassport Revenue by Country Table .....                           | 251 |
| Figure 8-56: Caribbean ePassport Solution Component Revenue Table.....                    | 252 |
| Figure 8-57: Caribbean ePassport Technology Revenue Table.....                            | 252 |
| Figure 8-58: Caribbean eVisa Revenue Chart .....  | 252 |
| Figure 8-59: Caribbean eVisa Revenue by Country Table .....                               | 253 |



|   |     |
|---|-----|
| Figure 8-60: Caribbean eVisa Solution Component Revenue Table .....         | 253 |
| Figure 8-61: Caribbean eVisa Technology Revenue Table .....                 | 253 |
| Figure 8-62: Europe ePassport Revenue Chart .....                           | 254 |
| Figure 8-63: Europe ePassport Revenue by Country Table .....                | 255 |
| Figure 8-64: Europe ePassport Solution Component Revenue Table .....        | 256 |
| Figure 8-65: Europe ePassport Technology Revenue Table .....                | 256 |
| Figure 8-66: Europe eVisa Revenue Chart .....                               | 257 |
| Figure 8-67: Europe eVisa Revenue by Country Table .....                    | 258 |
| Figure 8-68: Europe eVisa Solution Component Revenue Table .....            | 258 |
| Figure 8-69: Europe eVisa Technology Revenue Table .....                    | 258 |
| Figure 8-70: Middle East ePassport Revenue Chart .....                      | 259 |
| Figure 8-71: Middle East ePassport Revenue by Country Table .....           | 259 |
| Figure 8-72: Middle East ePassport Solution Component Revenue Table .....   | 260 |
| Figure 8-73: Middle East ePassport Technology Revenue Table .....           | 260 |
| Figure 8-74: Middle East eVisa Revenue Chart .....                          | 261 |
| Figure 8-75: Middle East eVisa Revenue by Country Table .....               | 261 |
| Figure 8-76: Middle East eVisa Solution Component Revenue Table .....       | 261 |
| Figure 8-77: Middle East eVisa Technology Revenue Table .....               | 262 |
| Figure 8-78: North America ePassport Revenue Chart .....                    | 263 |
| Figure 8-79: North America ePassport Revenue by Country Table .....         | 263 |
| Figure 8-80: North America ePassport Solution Component Revenue Table ..... | 264 |
| Figure 8-81: North America ePassport Technology Revenue Table .....         | 264 |
| Figure 8-82: North America eVisa Revenue Chart .....                        | 265 |
| Figure 8-83: North America eVisa Revenue by Country Table .....             | 265 |
| Figure 8-84: North America eVisa Solution Component Revenue Table .....     | 265 |
| Figure 8-85: North America eVisa Technology Revenue Table .....             | 265 |
| Figure 8-86: Pacific ePassport Revenue Chart .....                          | 266 |
| Figure 8-87: Pacific ePassport Revenue by Country Table .....               | 266 |
| Figure 8-88: Pacific ePassport Solution Component Revenue Table .....       | 267 |
| Figure 8-89: Pacific ePassport Technology Revenue Table .....               | 267 |
| Figure 8-90: Pacific eVisa Revenue Chart .....                              | 267 |
| Figure 8-91: Pacific eVisa Revenue by Country Table .....                   | 268 |
| Figure 8-92: Pacific eVisa Solution Component Revenue Table .....           | 268 |
| Figure 8-93: Pacific eVisa Technology Revenue Table .....                   | 268 |
| Figure 8-94: South America ePassport Revenue Chart .....                    | 269 |
| Figure 8-95: North America ePassport Revenue by Country Table .....         | 269 |
| Figure 8-96: North America ePassport Solution Component Revenue Table ..... | 269 |
| Figure 8-97: South America ePassport Technology Revenue Table .....         | 270 |
| Figure 8-98: South America Visa Revenue Chart .....                         | 270 |
| Figure 8-99: South America eVisa Revenue by Country Table .....             | 270 |
| Figure 8-100: South America eVisa Solution Component Revenue Table .....    | 270 |
| Figure 8-101: South America eVisa Technology Revenue Table .....            | 271 |



| Brazil     |                                  |   | General       | 2009        | 2010          | 2011          | 2012          | 20122         | 2014          |
|------------|----------------------------------|---|---------------|-------------|---------------|---------------|---------------|---------------|---------------|
| Country    | Region                           |   | South America |             |               |               |               |               |               |
|            | Border check points              | Air                                       | 23            |             |               |               |               |               |               |
|            |                                  | Land                                      | 47            |             |               |               |               |               |               |
|            |                                  | Sea                                       | 75            |             |               |               |               |               |               |
| Population | Domestic                         |   |               | 200,262,373 | 200,262,373   | 201,785,478   | 203,308,582   | 204,831,687   | 207,877,896   |
|            | Offshore                         |   |               | 1,201,574   | 1,210,713     | 1,219,851     | 1,228,990     | 1,238,129     | 1,247,267     |
|            | Inbound non-residents            |   |               | 5,176,250   | 5,305,656     | 5,438,298     | 5,574,255     | 5,713,611     | 5,856,452     |
| EPassports | Year Initiated                   |   | 2010          |             |               |               |               |               |               |
|            | Type of Security                 |   | BAC           |             |               |               |               |               |               |
|            | Types of Biometric               |   | Face          |             |               |               |               |               |               |
|            | Validity                         |   | 5             |             |               |               |               |               |               |
|            | Next Procurement                 |   | 2013          |             |               |               |               |               |               |
|            | Annual ePassport Volume          |   |               | 0           | 3,974,785     | 8,108,562     | 8,432,905     | 8,770,221     | 9,121,030     |
|            | Annual ePassport Revenue         |   |               | \$0         | \$120,811,423 | \$246,614,008 | \$256,472,221 | \$266,883,466 | \$277,228,699 |
|            | EPassport Issuing Locations      | Total                                     | 422           |             |               |               |               |               |               |
|            |                                  | Domestic                                  | 374           |             |               |               |               |               |               |
|            |                                  | Offshore                                  | 48            |             |               |               |               |               |               |
|            | EPassport Readers                | Total anticipated need                    | 821           |             |               |               |               |               |               |
|            |                                  | Installed Base                            |               | 0           | 0             | 50            | 103           | 210           | 250           |
|            |                                  | Annual Deployed Units                     |               | 0           | 0             | 50            | 53            | 107           | 40            |
|            | Biometric Readers (enrollment)   | Total Anticipated Need                    | 0             |             |               |               |               |               |               |
|            |                                  | Installed Base                            |               | 0           | 0             | 0             | 0             | 0             | 0             |
|            |                                  | Annual Deployed Units (incl. replacement) |               | 0           | 0             | 0             | 0             | 0             | 0             |
| EVisas     | Year Initiated                   |   | 2013          |             |               |               |               |               |               |
|            | Types of Biometric               |   | Finger        |             |               |               |               |               |               |
|            | Annual eVisa Applications        |   |               | 0           | 0             | 0             | 0             | 146,358       | 150,749       |
|            | Annual eVisa Revenue             |   |               | \$0         | \$0           | \$0           | \$0           | \$6,551,630   | \$6,748,179   |
|            | Offshore eVisa Issuing Locations |   | 110           |             |               |               |               |               |               |
| Readers    | Biometric Readers (enrollment)   | Installed Base                            |               | 0           | 0             | 0             | 0             | 249           | 261           |
|            |                                  | Annual Deployed Units (incl. replacement) |               | 0           | 0             | 0             | 0             | 249           | 12            |

**Research Report - ORDER FORM**



**The Global ePassport and eVisa Industry Report Available June 2010**  
**Opportunity Analysis and Market Forecasts 2010 to 2014**

Critical Market Data. Comprehensive Insight. Targeted Revenue Forecasts

*The Global ePassport and eVisa Industry Report* provides unique insight into the worldwide opportunity for the development of secure electronic passport and visa documents—the current state of the global market is evaluated in terms of how this market will likely evolve and where the most lucrative opportunities will be. This unprecedented, comprehensive report offers unbiased critical perspective and previously unpublished data and statistics on the ePassport and eVisa marketplace: **Preview the report at [www.acuity-mi.com/GePPEV\\_Report.html](http://www.acuity-mi.com/GePPEV_Report.html).**

|                          |  |                      |
|--------------------------|--|----------------------|
| <input type="checkbox"/> | The Global ePassport and eVisa Industry Report (single user) | \$ 7500.00 USD       |
| <input type="checkbox"/> | The Global ePassport and eVisa Industry Report (2-10 users)  | \$10,000.00 USD      |
| <input type="checkbox"/> | The Global ePassport and eVisa Industry Report (unlimited)   | \$12,500.00 USD      |
| TOTAL: \$                |  | <input type="text"/> |

**Your order will be delivered in PDF format via email to the address listed below:**

Date: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Email Address: \_\_\_\_\_  
 Country: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_

**Payment Options:**

- |  |  |
|--|--|
| <p><b>1) Credit Card/PayPal</b></p>  | <p><a href="http://www.acuity-mi.com/GePPEV_Order.html">http://www.acuity-mi.com/GePPEV_Order.html</a></p> |
| <p><b>2) Wire Transfer</b><br/>         Sender is responsible for all fees</p> | <p><b>CALL or EMAIL FOR INSTRUCTIONS</b><br/> <b>+1 303 449 1897</b><br/> <b>info@acuity-mi.com</b></p>    |
| <p><b>3) Check or Money Order:</b><br/>         (US Only)</p>                  | <p><b>Acuity MI, LLC</b><br/>         640 W. Linden St<br/>         Louisville, CO 80027 USA</p>           |

More Information Available at

[www.acuity-mi.com](http://www.acuity-mi.com)

Questions? **+1 303.449.1897** [info@acuity-mi.com](mailto:info@acuity-mi.com)