The Global *National eID* Industry Report

Market Analysis and Forecasts 2010 to 2015

Comprehensive Market Data. Critical Insight. Targeted Revenue Forecasts.

Available
June 2011

by

ACUITY
MARKET INTELLIGENCE

About Acuity Market Intelligence

Acuity Market Intelligence is a leading Biometrics and Electronic Identity 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 and deployment of electronic national identification documents (National eID) and the systems that support them. 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 National eID 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 National eID's.

AUDIENCE: Individuals responsible for strategic planning, business and market development, and sales related to National eID initiatives including vendors, integrators, investors, consultants, solution providers, and public sector staff responsible for evaluating, developing and implementing National eID 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 national ID's issued, and program costs. 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: Factors ranging from reusable ePassport infrastructures to intensified engagement of international financial institutions contribute to a surge in National eID programs in the 2010-15 time frame. By 2015 the number of countries issuing National eID's, the number of documents issued annually, as well as the number of National eID's in circulation will have eclipsed those numbers for traditional National ID's. However, in the absence of mandates no universal model will have emerged and the landscape will resemble a mix of experiments intended to maximize the perceived benefits of multi-application, transactional National eID systems. Successful National eID programs will be judged by the degree to which the population will use public and private eID-enabled programs and services.

AUTHORS: C. Maxine Most, Principal, Acuity Market Intelligence
Rudie Lion, Principal, Acuity Market Intelligence

Preface

April 2011

National eID's are the next generation of identity documents for a country's citizens and residents, elevating their use from simple identification credentials to multi-application transactional systems underpinning eGovernment and eventually commercial services. The market for National ID's (traditional and eID) is as large as there are countries in the world, but ill-understood and almost as diffuse in format and application as the number of countries issuing these documents.

The cost of a National eID system extends far beyond the production of the credential itself, and can be upwards of $1 billion. Costs are primarily driven by a) the degree of technical complexity of the National eID, and b) countries' ability and readiness to provide a trustworthy infrastructure commensurate with the type of National eID chosen. The latter more and more involves back-end processes such as massive databases, high-end authentication mechanisms, and local- and federated identity management. Associated costs include systems integration, reengineering, and restructuring. Countries take various roads – some prefer readying their infrastructure prior to launching a National eID, others let a launched National eID dictate the order and degree of required infrastructure developments. In practice, each country attempts to strike a balance between the two depending on existing infrastructure, financial resources, and political realities.

In the period covered by this report (2010-2015) an unprecedented number of countries will launch National eID's, despite absence of legislative mandates or international standards. Some reasons underlying this surge include reuse of the infrastructure created by ePassport programs, increased maturity and reduced costs of technologies required for National eID programs, and stepped-up structural funding by the international financial aid community.

As a result, by 2013 the number of countries issuing National eID's will overtake the number of countries issuing traditional National ID's. The total number of countries worldwide issuing National ID's will rise from 100 in 2010 to 125 in 2010, with the share of National eID's climbing from 29% to 66%. The highest adoption rates will be in Europe, while Africa experiences the highest number of new National eID's in countries that had no or only rudimentary ID programs. On the flipside, there are no indications that a number of leading National ID-less economies in the developed world (USA, Canada, Australia, UK, and others) will make the move to a National ID – "e" or not.

Alongside the rise in National eID programs it is worth noting that no universal model has emerged. The stakes are high, both from the national government and the vendor community perspective, and the outcome uncertain. Neither short-term revenue for vendors nor 100% distribution of credentials to the eligible population of a given country should be considered the hallmarks of success. Instead, it is likely that success in the National eID market will be measured by the proliferation of eID enabled services and programs, the revenue (or cost reductions) such services will generate to public and private entities, and the uptake thereof by the general eID equipped public.

For government authorities and vendors to move forward it is critical to understand the data driving these trends, including worldwide unit adoption and revenue forecasts across multiple elements, as well as the implementation of alternative business models. *The Global <u>National eID</u> Industry Report* provides 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@aucity-mi.com

Introduction

The Global National eID Report is a data driven analysis of the state of the market for electronic national identity documents and the systems and infrastructure that support them. 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 type and distribution of authentication methods, biometrics enrollment, 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:

Traditional National ID: A paper or card based identity document holding at minimum a citizen's biographic data according to the requirements of that particular country. The identity document may hold biometric data such as the holder's photograph or one or more fingerprints; it may incorporate one or multiple security features to prevent forgeries, as well as automated verification tools such as a barcode or Machine Readable Zone.

National eID: A card-based identity document with an embedded IC chip to facilitate the cardholder's electronic identification and authentication in addition to the visual identification typical of traditional National ID's.

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 annual National ID (tradtitional and eID) unit volumes, population levels and growth, domestic 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 Ministries of Interior, Finance, and Justice. Additional data was sourced from non-governmental agencies tasked with providing domestic and global insight into population statistics 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, deployment practices, and attrition 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.

Country Profiles

Each of the 82 countries that currently has or will have a National eID program in place by the end of 2015 is profiled in a one page overview. These overviews provide details about National eID programs including the year the program was initiated, types of biometric(s) used, type of IC chip used, annual volumes and revenue, numbers in circulation, validity, and number of issuing locations. In addition, 13 countries currently not issuing National ID's and having no or no firm plans to issue National ID's by 2015 are profiled separately.

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 National eID markets and the associated complexity involved in modeling data and forecasting revenues, *it is critical that the methodology, assumptions, and model notes in the Appendix be reviewed to gain relevant insight form the data.* Additional information is provided in the report in specific sections to reinforce the underlying assumptions where deemed necessary.

Preliminary Table of Contents

Preliminary Table of Figures

Sample Country Profile

Chile

Synopsis

Chile has a stable and growing economy with a digital infrastructure well-prepared to support a National eID and eGovernment. It introduced an ePassport in 2009, and is likely to reuse sunk investments when the National eID will be introduced in 2012. The NeID will contain many physical security features, face and finger biometrics, contact chip and a digital signature. Chile plans to offer a range of government services in addition to basic identification.

At a glance

Population	16,454,145
Eligible cardholders	16,125,060
eID Evolution Index ranking	27
eID Services Index ranking	22
NeID launch	2012
Age first issued	0
Age mandatory to carry	18
Validity	5 years
Cost to citizens	$7.60
Contact chip	Y
Contactless	N
Match-on-card	N
Finger	Y

Annual Unit and Revenue Projections

	2010	**2011**	**2012**	**2013**	**2014**	**2015**
Traditional NID (million units)	4.3	4.3	0	0	0	0
Traditional NID (million USD$)						
NeID (million units)	0	0	4.3	4.3	4.3	4.3
NeID (million USD$)						
Biometric capture units)	0	1500	1000	500	250	250
Biometric capture USD$)						
Document readers (units)	0	750	750	1200	1300	1400
Document readers (USD$)						

ACUITY MARKET INTELLIGENCE

Research Report ORDER FORM

The Global *National eID* Industry Report

Available June 2011

Market Analysis and Forecasts 2010 to 2015

Comprehensive Market Data. Critical Insight. Targeted Revenue Forecasts

15% Pre-publication discount when ordered before May 21, 2011

The Global *National eID* Industry Report provides unique insight into the worldwide opportunity for national ID's and associated processes — 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 National eID marketplace: **Preview the report at www.acuity-mi.com/GNeID_Report.php**

The Global *National eID* Industry Report

☐ Single User License	~~$ 7,500.00 USD~~	$ 6,375.00 USD
☐ Limited Enterprise License: 2-10 users	~~$10,000.00 USD~~	$ 8,500.00 USD
☐ Unlimited Enterprise License: 10+ users	~~$12,000.00 USD~~	$10,625.00 USD

DOMESTIC WIRE PAYMENTS ADD $20 USD
INTERNATIONAL WIRE PAYMENTS ADD $60 USD TOTAL: $ ____________

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:

1) Credit Card/PayPal	http://www.acuity-mi.com/Buy_Research.php
2) Wire Transfer	Contact Acuity – info@acuity-mi.com
3) Check or Money Order: (US Only)	**Acuity MI, LLC** 40 Mechanic Street Milburn, New Jersey 07041 USA

www.acuity-mi.com
+1 303.449.1897 info@acuity-mi.com