The Global Market for National eIDs
Market Data and Analysis

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Smart Card Alliance
November 2 – 4, 2011
Washington DC

About Acuity

Acuity Market Intelligence consistently delivers thought-provoking, hype-free, data-driven insight and analysis

- **Founded in 2001** to address nascent biometrics market
- **Proven accurate and reliable market analysis**
- Focus on **Biometrics and Electronic Identity** markets
- Latest research: Global and Regional **National ID, ePassport and eVisa,** and **Biometric** Industry Reports

Today's Discussion

- Categories of National eIDs

- National eID Adoption

- National eID Revenues

- The *eID Constellation*©

- eID Market Evolution

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Categories of National eIDs

Category	Description
Category 1: NeID	A chip or optical storage based National ID card with or without biometrics.
Category 2: BN	Traditional or non-chip based National ID card (NID) leveraging biometrics to ensure each cardholder is uniquely identified
Category 3: RO ©Acuity Market Intelligence	Biometric Registry Only - A biometric based centralized registry that issues a unique identity number for the enrolled population

Category Adoption National eIDs

NeID Program Type	2010	2011	2012	2013	2014	2015
Category 1: **NeID (chip card)**	35	50	67	77	82	85
Category 2: **BN (NID with Biometrics)**	18	23	25	25	25	25
Category 2 to 1: **Current BN, Planned NeID**	12	8	5	0	0	0
Category 3: **RO - Biometric Registry**	2	3	3	4	4	4
Total ©Acuity Market Intelligence	67	84	100	106	111	114

Global *National ID* Country Adoption

— Traditional — eID — All National ID

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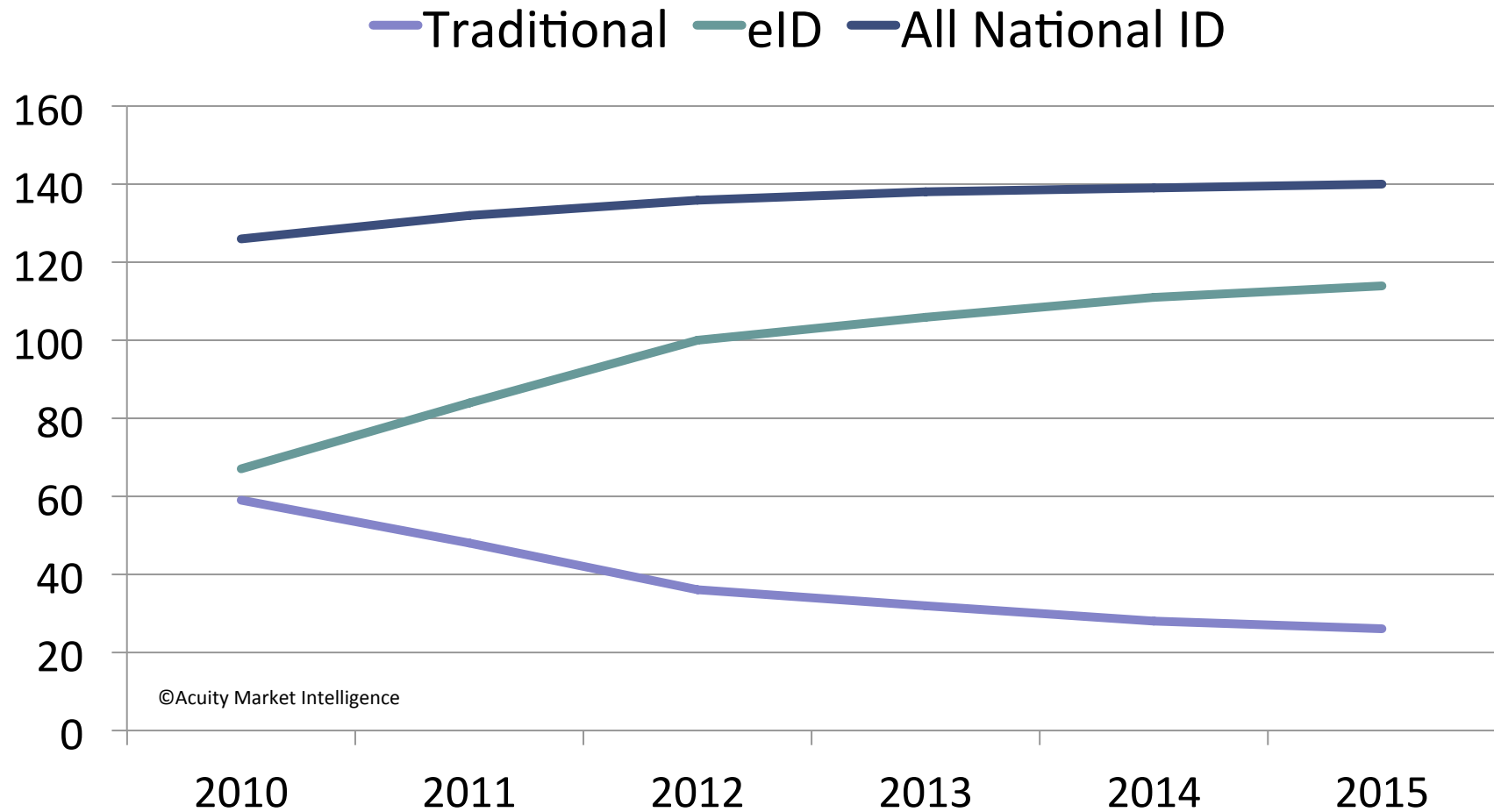
114 Countries Adopt Nat eIDs by 2015

Global number of Countries issuing National ID's						
©Acuity Market Intelligence	2010	2011	2012	2013	2014	2015
Traditional	59	48	36	32	28	26
Share of total	*47%*	*36%*	*26%*	*23%*	*20%*	*19%*
eID*	67	84	100	106	111	114
Share of total	*53%*	*64%*	*74%*	*77%*	*80%*	*81%*
Total	126	132	136	138	139	140

eID's Increasingly Dominate National ID Market Share
*includes India
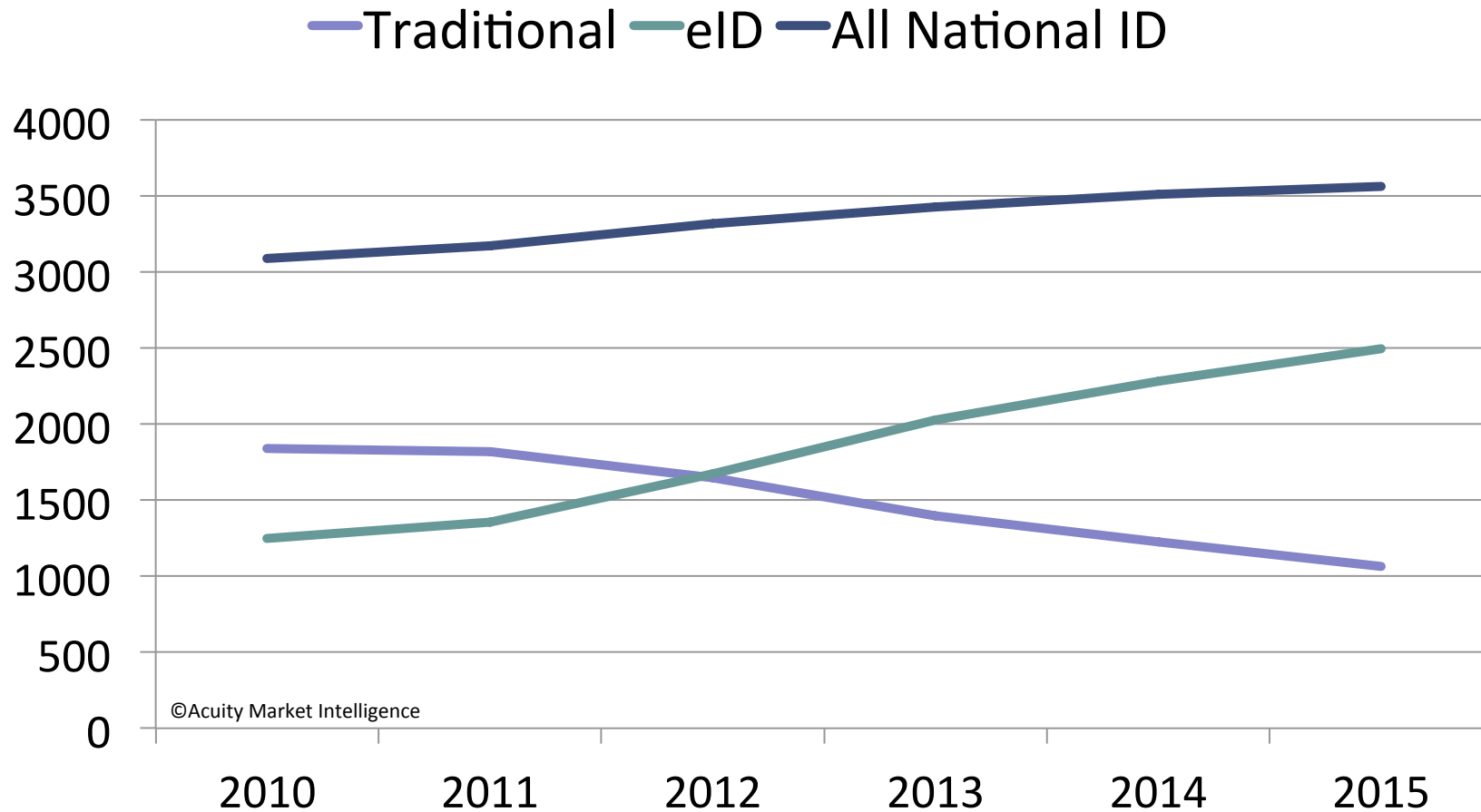
Global *National ID* Volume (millions)

Legend: Traditional — eID — All National ID

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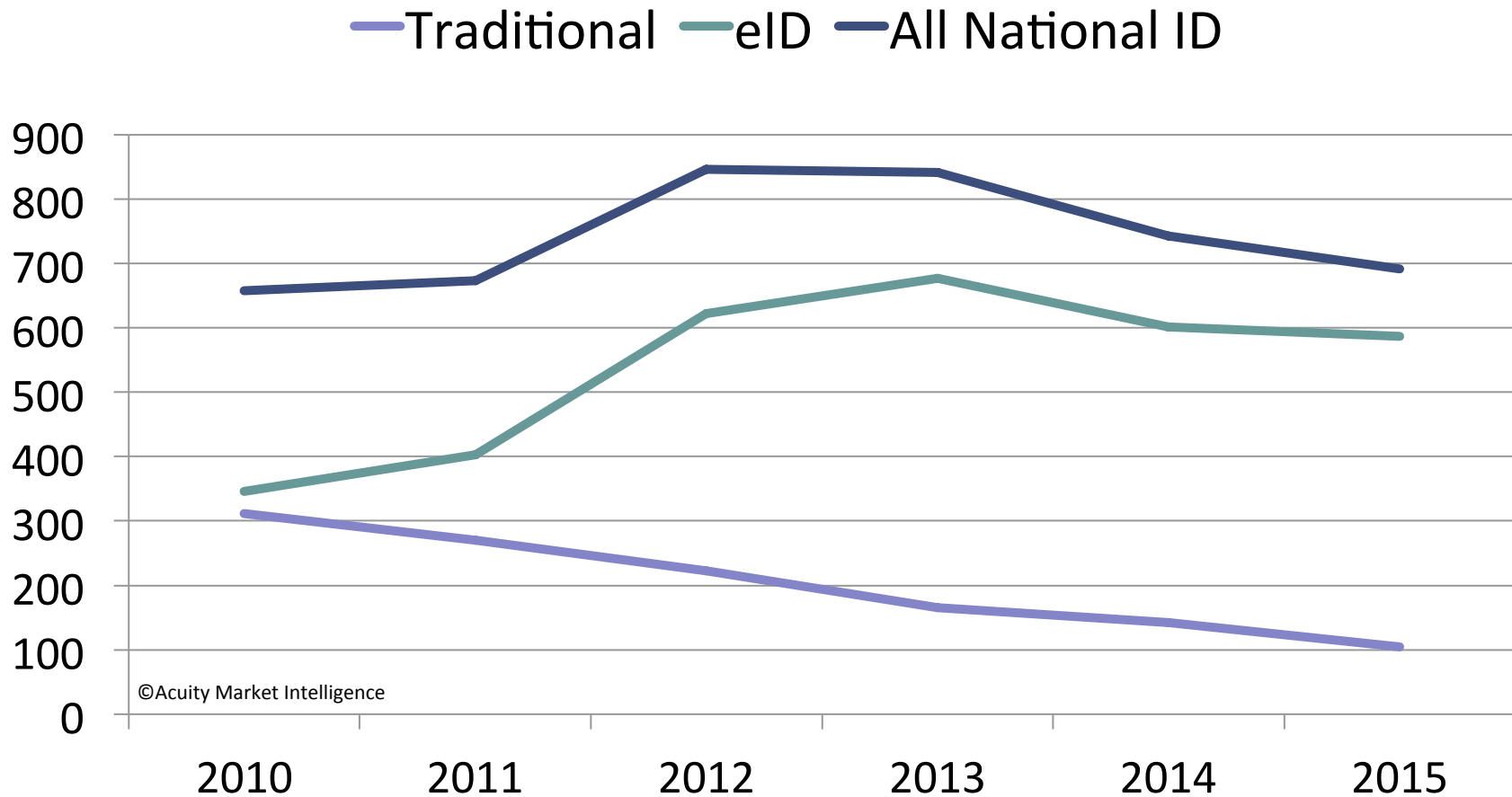
85% of Nat IDs Issued are eIDs by 2015

Global volume of annually issued National ID's (millions)						
©Acuity Market Intelligence	2010	2011	2012	2013	2014	2015
Traditional	312	271	223	165	142	105
Share of total	*47%*	*40%*	*26%*	*20%*	*19%*	*15%*
eID*	346	403	622	677	601	586
Share of total	*53%*	*60%*	*74%*	*80%*	*81%*	*85%*
Total	658	673	846	842	743	691

Chinese eID volume share drops from 83% to 50%

*does not include India
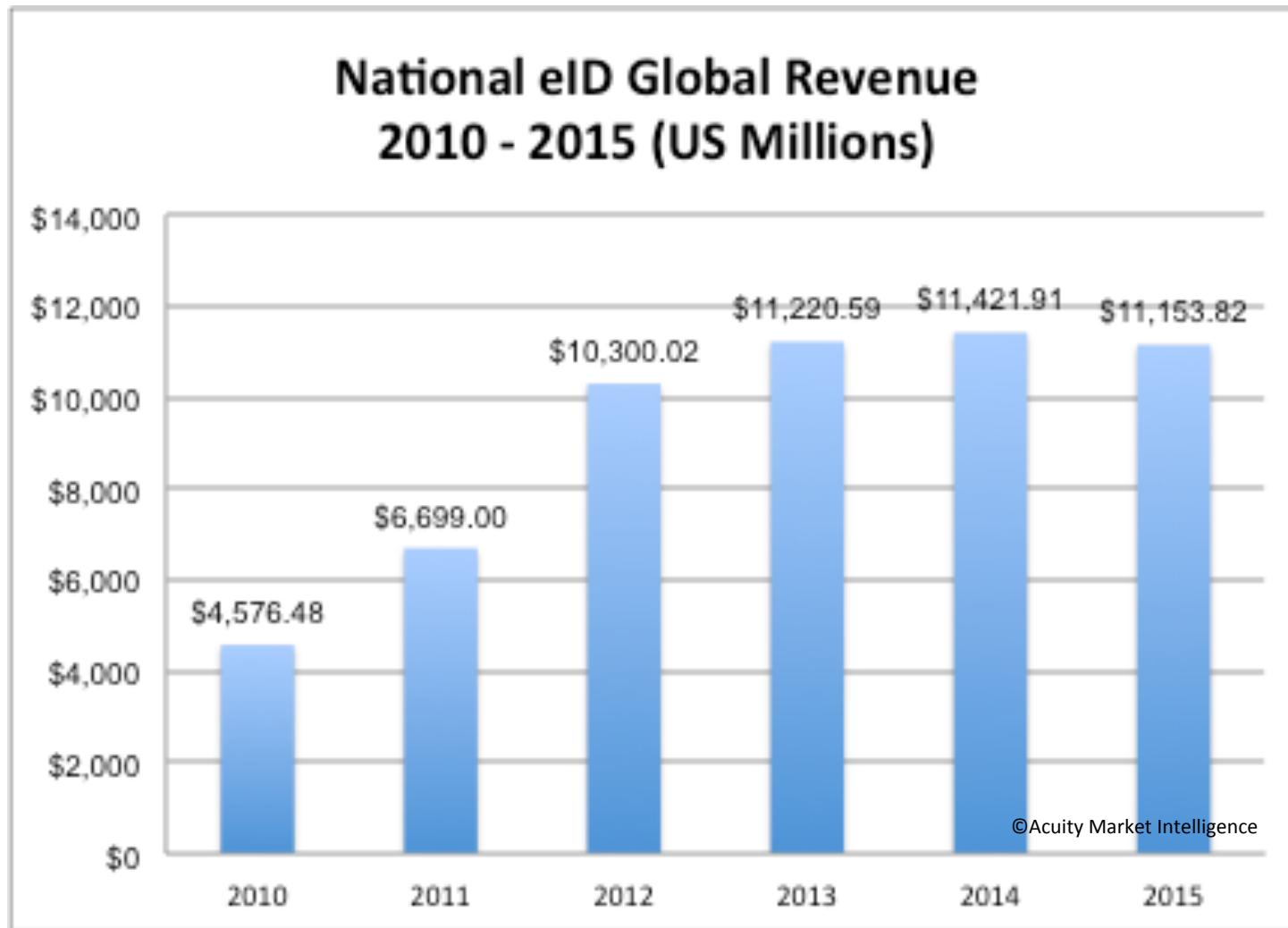
Global *National ID* Circulation (millions)

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70% of Nat ID Circulation are eIDs by 2015

Global volume of annually issued National ID's (millions)						
©Acuity Market Intelligence	2010	2011	2012	2013	2014	2015
Traditional	1839	1821	1645	1398	1227	1064
Share of total	*60%*	*57%*	*50%*	*41%*	*35%*	*30%*
eID*	1248	1354	1674	2028	2284	2498
Share of total	*40%*	*43%*	*50%*	*59%*	*65%*	*70%*
Total	3088	3175	3319	3426	3511	3563

More than 1/3 of world's population has an eID in 2015

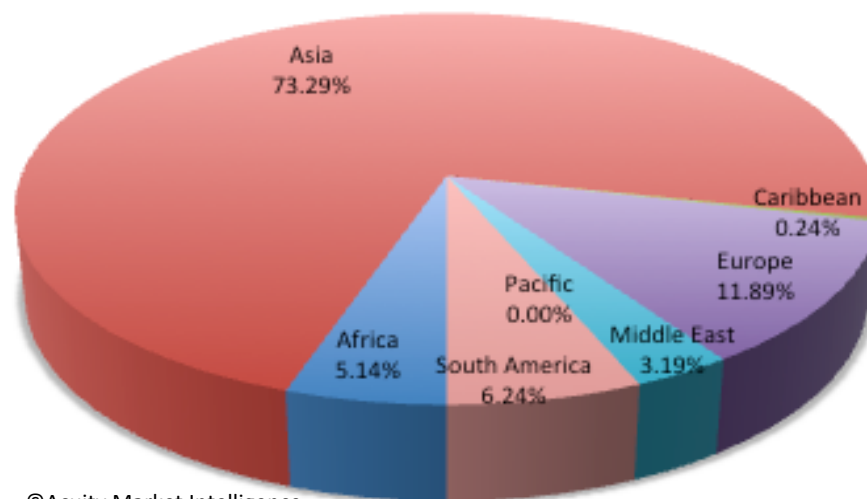### *does not include India

Global *National eID Program* Revenue

National eID Global Revenue
2010 - 2015 (US Millions)

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Regional Market Share eIDs

November 2011

Regional eID Program Revenue Share

National eID Regional Revenue Share 2010

Asia 67.67%
Caribbean 3.45%
Europe 10.80%
Middle East 5.76%
Pacific 0.02%
South America 5.89%
Africa 6.40%
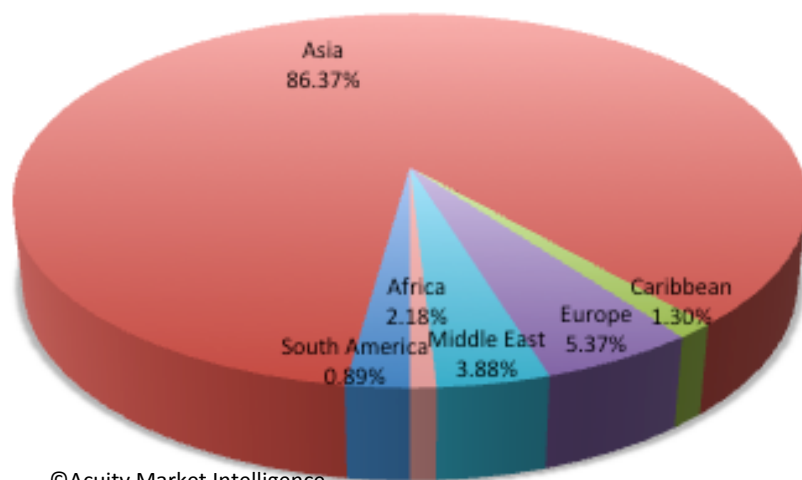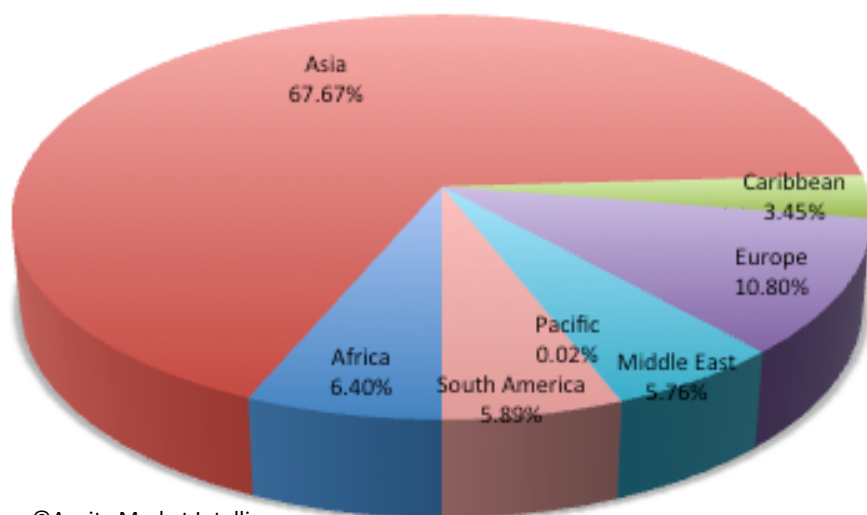
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National eID Regional Revenue Share 2015

Asia 65.74%
Caribbean 0.77%
Europe 13.86%
Middle East 3.16%
North America 2.53%
Pacific 2.47%
South America 5.76%
Africa 5.71%
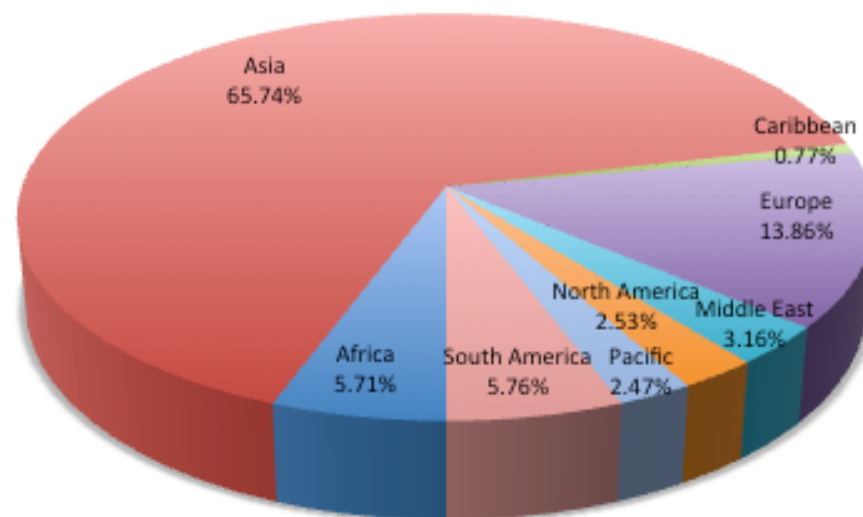
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The *eID Constellation*©

- A snapshot of the State of the eID Market based on two multi-faceted indices:

  - The <u>eID Evolution Index</u>©, along on the X-axis, indicates the level of eID technology and operational maturity, and

  - The <u>eID Service index</u>©, along the Y-axis, indicates the generalized level of infrastructure capability required to provide integrated, trusted eID related applications and services.

- Produces a quadrant-based, visual tool that characterizes the relative progress towards providing a trusted, highly integrated, multi-application eID service environment.
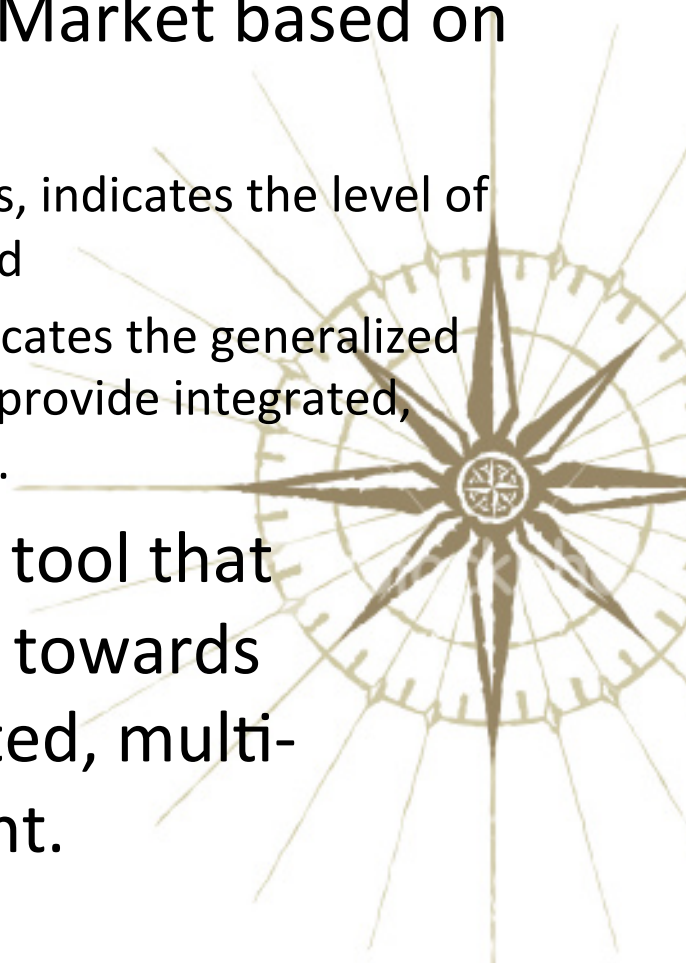
National *eID Evolution Index*

Acuity proprietary index indicating the technology and operational maturity Phase

Phase	Description
	©Acuity Market Intelligence
1	No functioning Registry, or Non-digital Registry
2	Digital Registry, No National ID, Multiple Autonomous card programs
3	Digital Registry, Traditional National ID, No or Multiple Autonomous card programs
4	Digital Registry, eID, Multiple Autonomous card programs
5	Digital Registry, Multi-functional eID
6	Single identifier, Multiple programs

National *eID Service Index*

A composite index based on a number of established global metrics combined with Acuity proprietary eID specific indicators

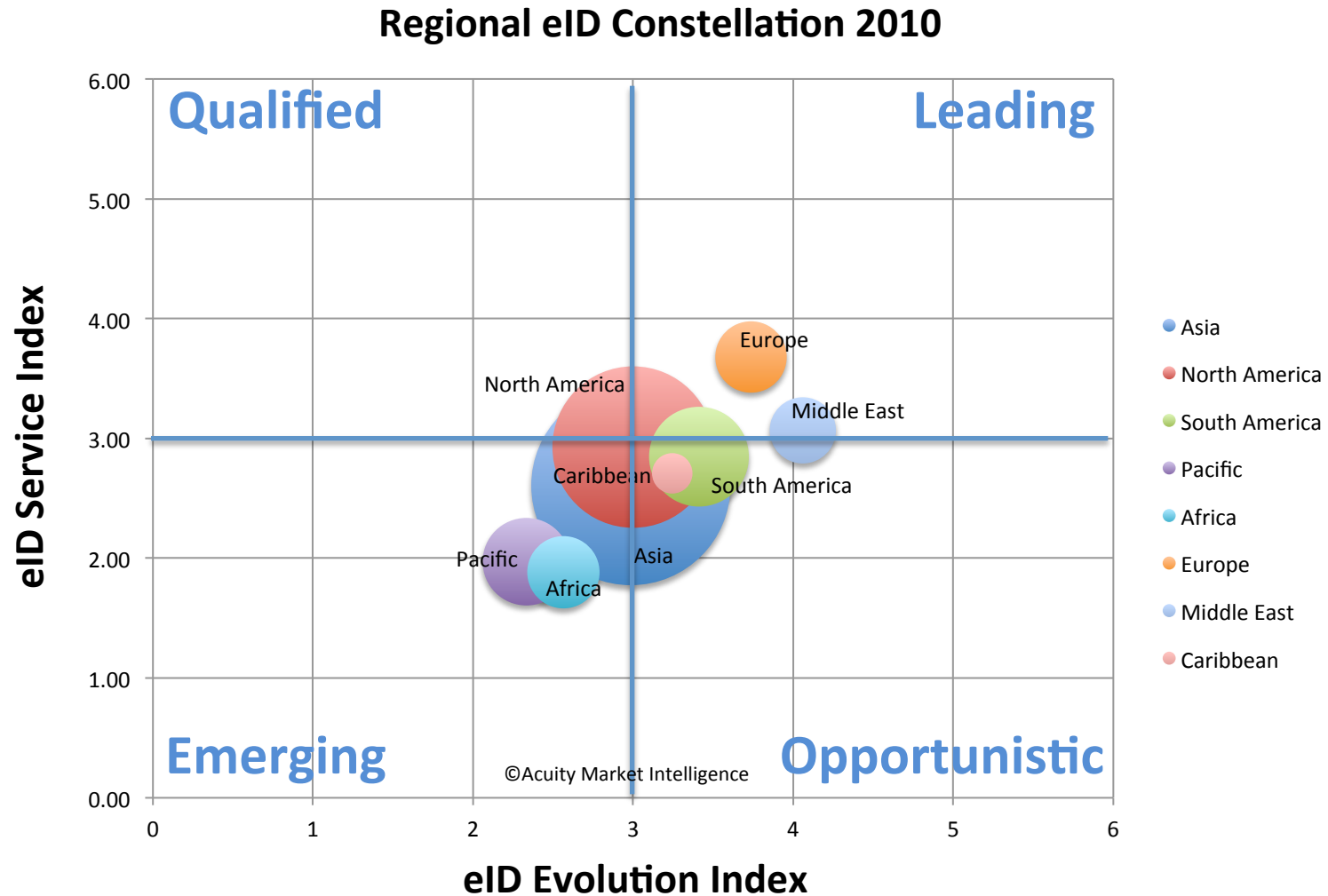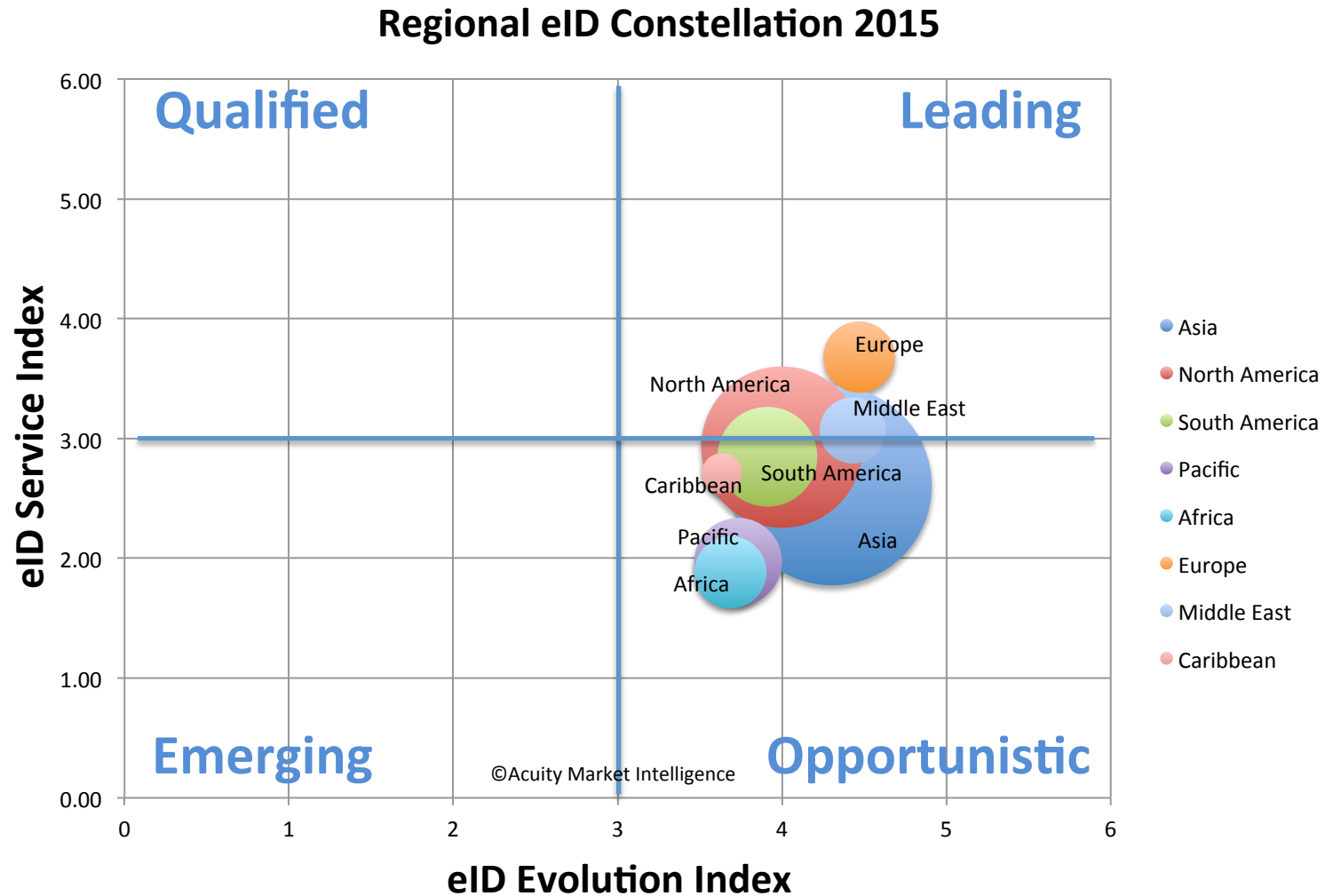| Indices ©Acuity Market Intelligence |
|---|
| Global Competitiveness |
| Political Stability |
| Financial Resources |
| Mobile Phone Usage |
| eID Service Readiness |

eID Constellation: Regional NeIDs 2010

Regional eID Constellation 2010

Bubble chart with x-axis "eID Evolution Index" (0 to 6) and y-axis "eID Service Index" (0.00 to 6.00). Quadrants labeled Qualified, Leading, Emerging, Opportunistic. Data points plotted: Europe, North America, Middle East, Caribbean, South America, Pacific, Asia, Africa.

Legend:
- Asia
- North America
- South America
- Pacific
- Africa
- Europe
- Middle East
- Caribbean

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eID Constellation: Regional NeIDs 2015

Regional eID Constellation 2015

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eID Constellation: Select NeIDs 2010

Global eID Constellation 2010

eID Constellation: Select NeIDs 2015


Global eID Constellation 2015

Market Development

- Opportunities
  - Domestic or International body support of: Fair Elections, Aid distribution, Fraud Prevention, Financial Reforms
  - Opportunities in Enrolment, Credentialing, Authentication, Integration based on current phase of eID evolution and defined upgrade cycles
  - Internal and Regional leverage of eIDs and eID Infrastructure
  - eID Facilitation of Service Based Business Models

- Obstacles
  - Unfunded or Underfunded "Pet" programs
  - "Show" programs
  - Unanticipated costs due to inadequate infrastructure
  - Ownership Conflicts and Silo Confrontation
  - Public Security, Privacy, Civil Liberties Concerns

Global National ID Industry Report

- Quantifies Current Market and Global Opportunities
  - Characterizes eID Program for 114 current or planned eID Issuing Countries: Biometrics, Chip Cards, Registry Only
  - eID Volume and Program Revenue
  - Cards, Biometrics, and Reader Volume and Revenue
- Market Development
- Enables Comparative Analysis
  - Globally, Regionally, and By Country
  - Constellation

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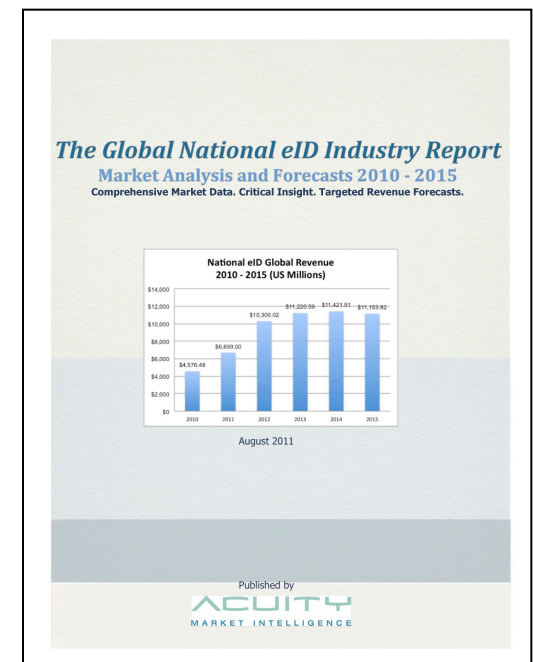
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Please visit **www.acuity-mi.com**

For more market analysis and to preview

The _National eID_ Industry Report

The Asia Pacific ePassport and eVisa Industry Report

The Global ePassport and eVisa Industry Report

The Future of Biometrics

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