



Carnegie Mellon
Software Engineering Institute

Process Maturity Profile

CMMI[®] For Development SCAMPISM Class A Appraisal Results 2010 Mid-Year Update

September 2010

We could not produce this report without the support of the organizations and lead appraisers who reported their appraisal results to the SEISM.

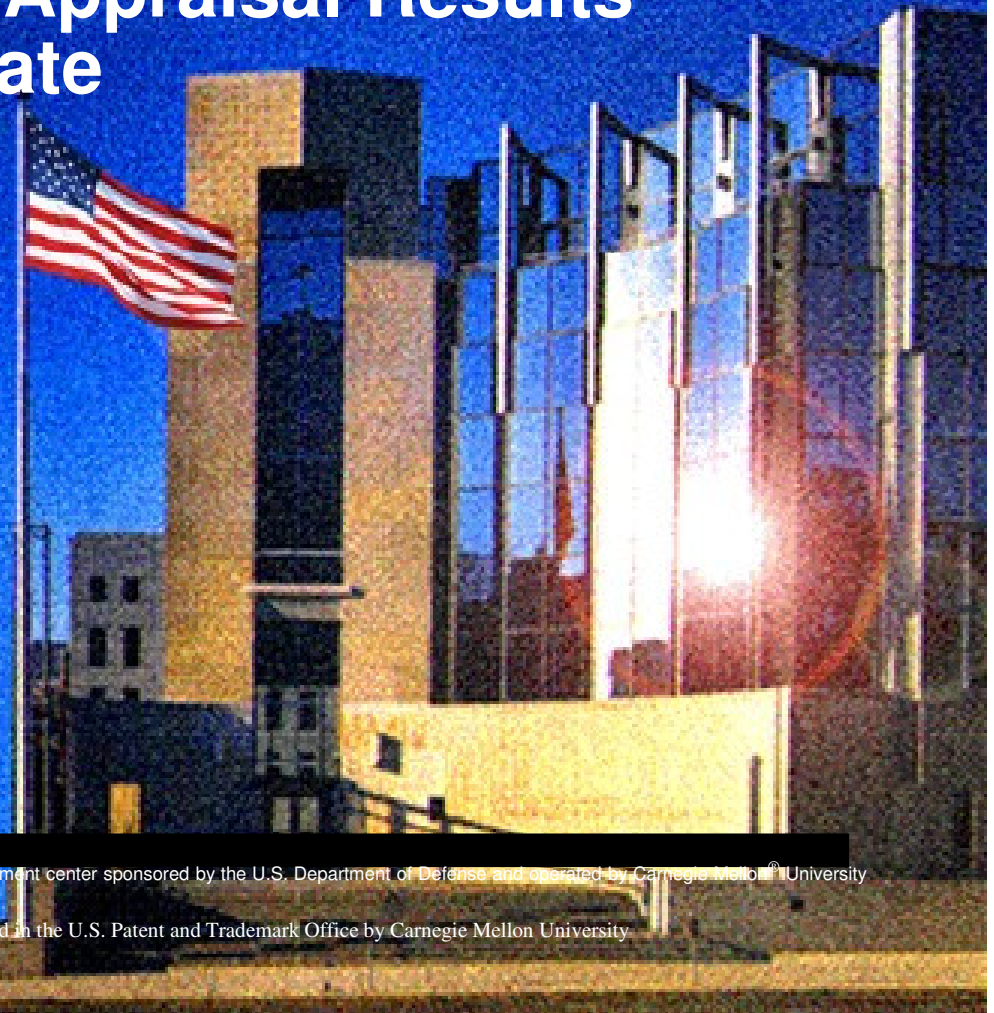
Our many thanks for their continuing cooperation with our data collection and analysis efforts.

CMMI Appraisal Program

The Software Engineering Institute is a federally funded research and development center sponsored by the U.S. Department of Defense and operated by Carnegie Mellon[®] University

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Outline

Introduction

Current Status

Community Trends

Organizational Trends

Summary And Terms used in this Briefing

How to Report your Appraisal Results to the SEI

This briefing is based solely on the appraisals reported to the SEI. It cannot be used as a source for an exact indicator of all organizations in the world using CMMI models or appraisal methods nor can it be used for certification or verification purposes.

The SEI does not certify appraisal results or organizations. The SEI licenses SEI Partners, authorizes/certifies lead appraisers, team leaders and high maturity lead appraisers to conduct appraisals. Neither the SEI nor any other organization is a “certifying authority” of the results from a SCAMPI appraisal. Therefore requests to the SEI to provide information to be used for this purpose can not be fulfilled. Information provided by the SEI, such as this briefing, is to demonstrate reported results of the use of CMMI products and services only.

Organizations performing source selection or verification should consider performing an evaluation appraisal. For more information on appraisal methods and for a directory of authorized lead appraisers who can perform them, visit:

<http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm>



Introduction: Purpose

Characterize the adoption of CMMI® - DEV

Describe results from Standard CMMI Appraisal Method for Process Improvement (SCAMPISM) v1.1/v1.2 Class A appraisals using Capability Maturity Model® Integration (CMMI-SE/SW/IPPD/SS v1.1 or CMMI - DEV v1.2) *

Encourage continued reporting of results

* Organizations previously appraised against CMMI v1.0 and which have not reappraised against v1.1 or v1.2 are not included in this report

Please visit: <http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm> for additional information or questions you may have about this briefing before contacting the SEI directly



Introduction - 2: Briefing Contents

This briefing includes three primary sections:

1. Current Status

- Snapshot of the software community based on the most recent appraisal, since 2002, of reporting organizations

2. Community Trends

- Global distribution of appraisals
- Growth in the number of appraisals performed
- Shifts in the maturity profile over time

3. Organizational Trends

- Time to move up in maturity based on change in maturity level and time between appraisals



Current Status

SCAMPI v1.1/v1.2 Class A appraisals conducted from the SCAMPI V1.1 April 2002 release through June 2010 and reported to the SEI by July 2010

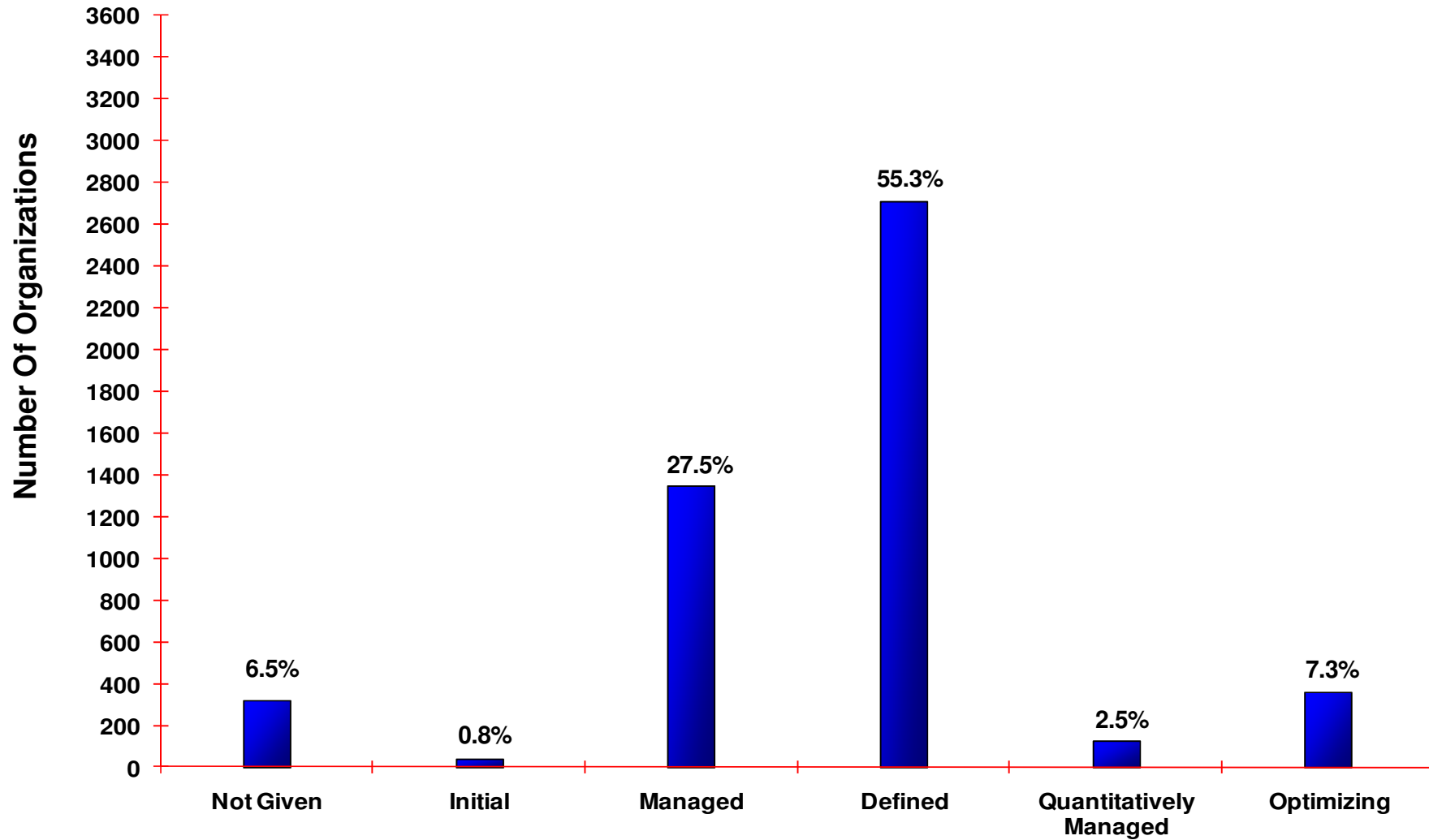
- **6,126 appraisals**
- **4909 organizations**
- **3,857 participating companies**
- **957 reappraised organizations**
- **34,291 projects**
- **75.3% Non-USA organizations**

Please refer to: Terms Used in this Report on page 27

Additional charts providing different views and break down of this information will be added to this briefing as more appraisal data is reported to the SEI over time.



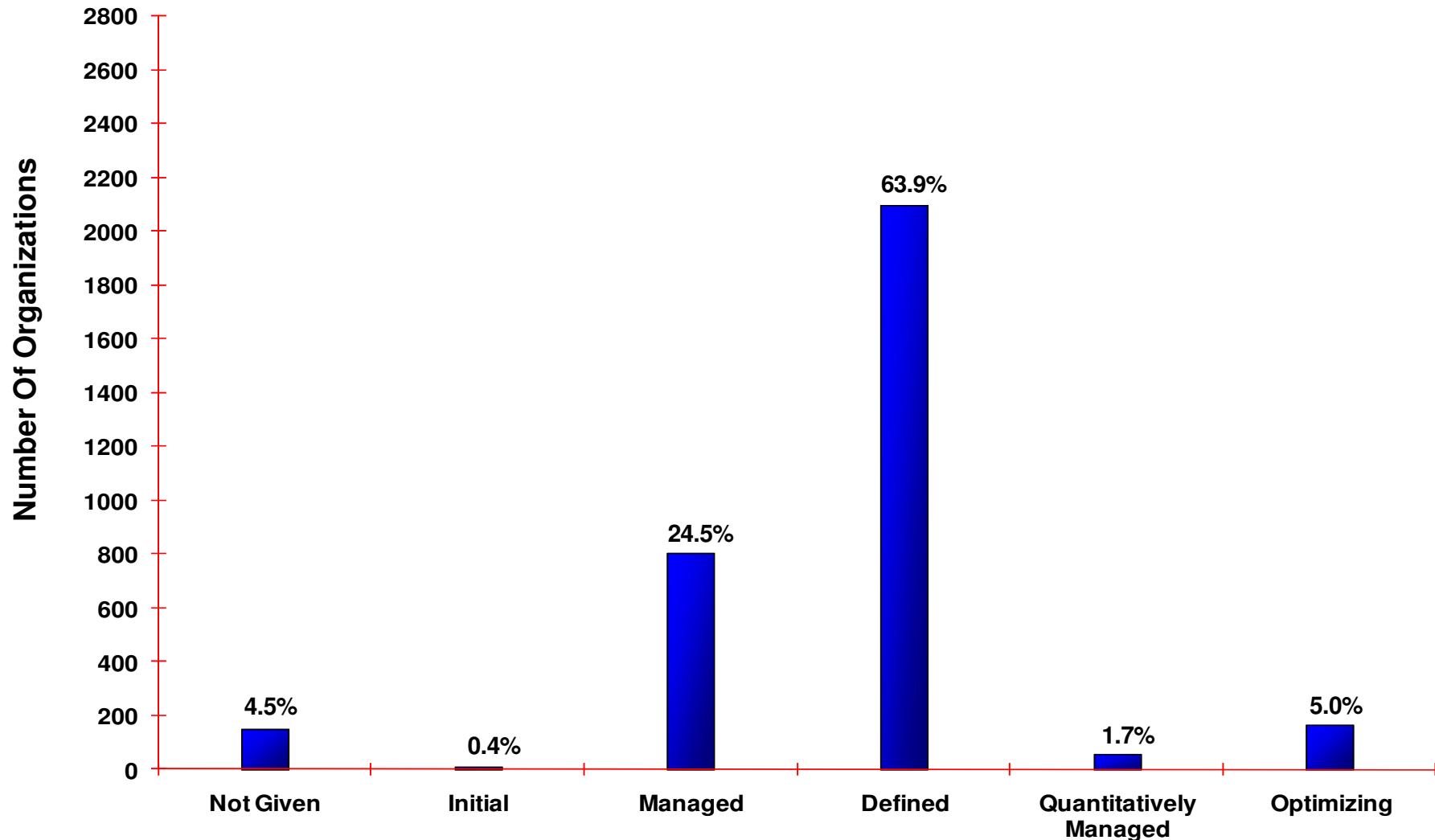
Process Maturity Profile by All Reporting Organizations



Based on most recent appraisal of 4909 organizations



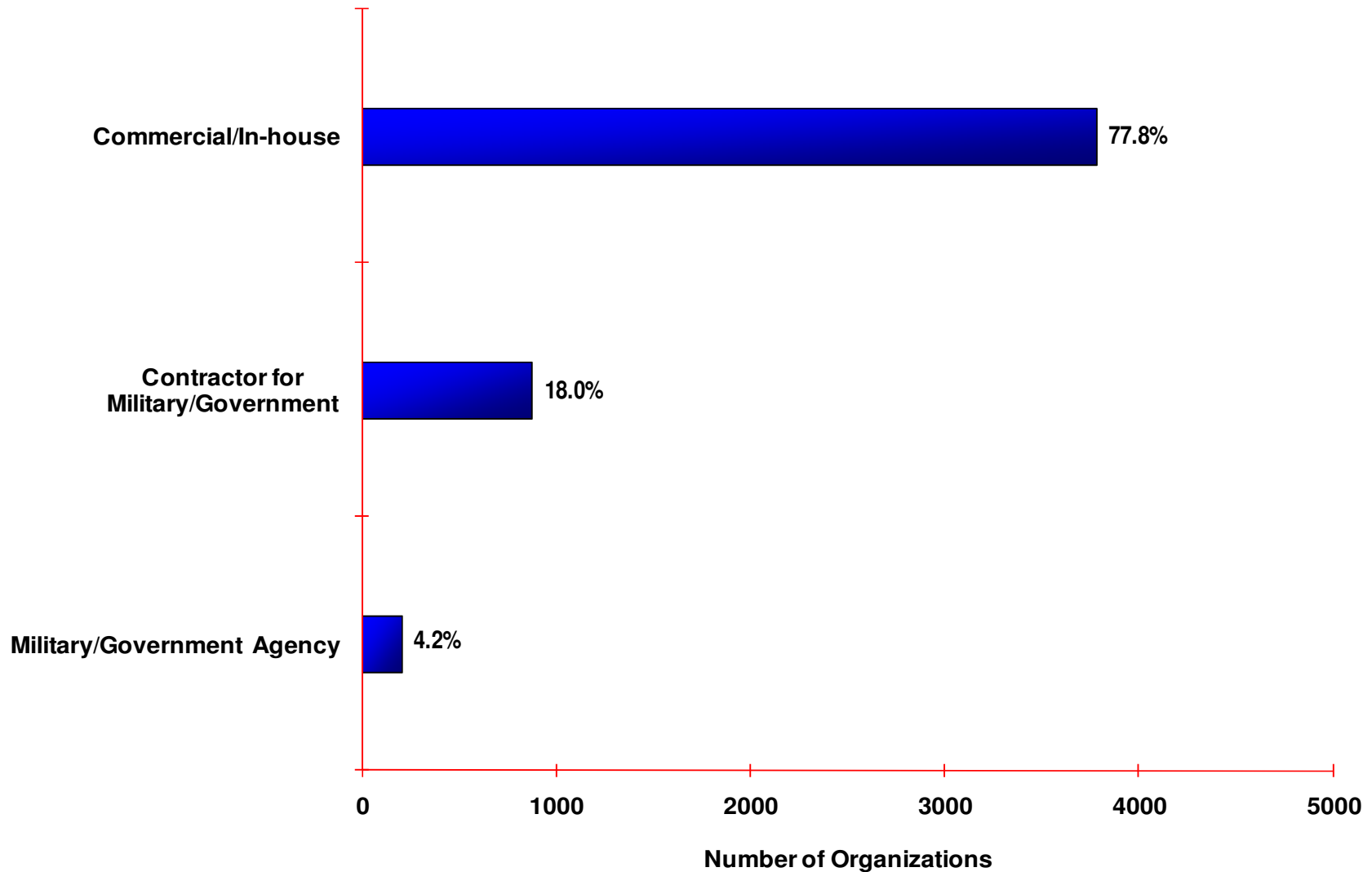
Process Maturity Profile (V1.2 Only) by All Reporting Organizations



Based on most recent appraisal of 3284 organizations



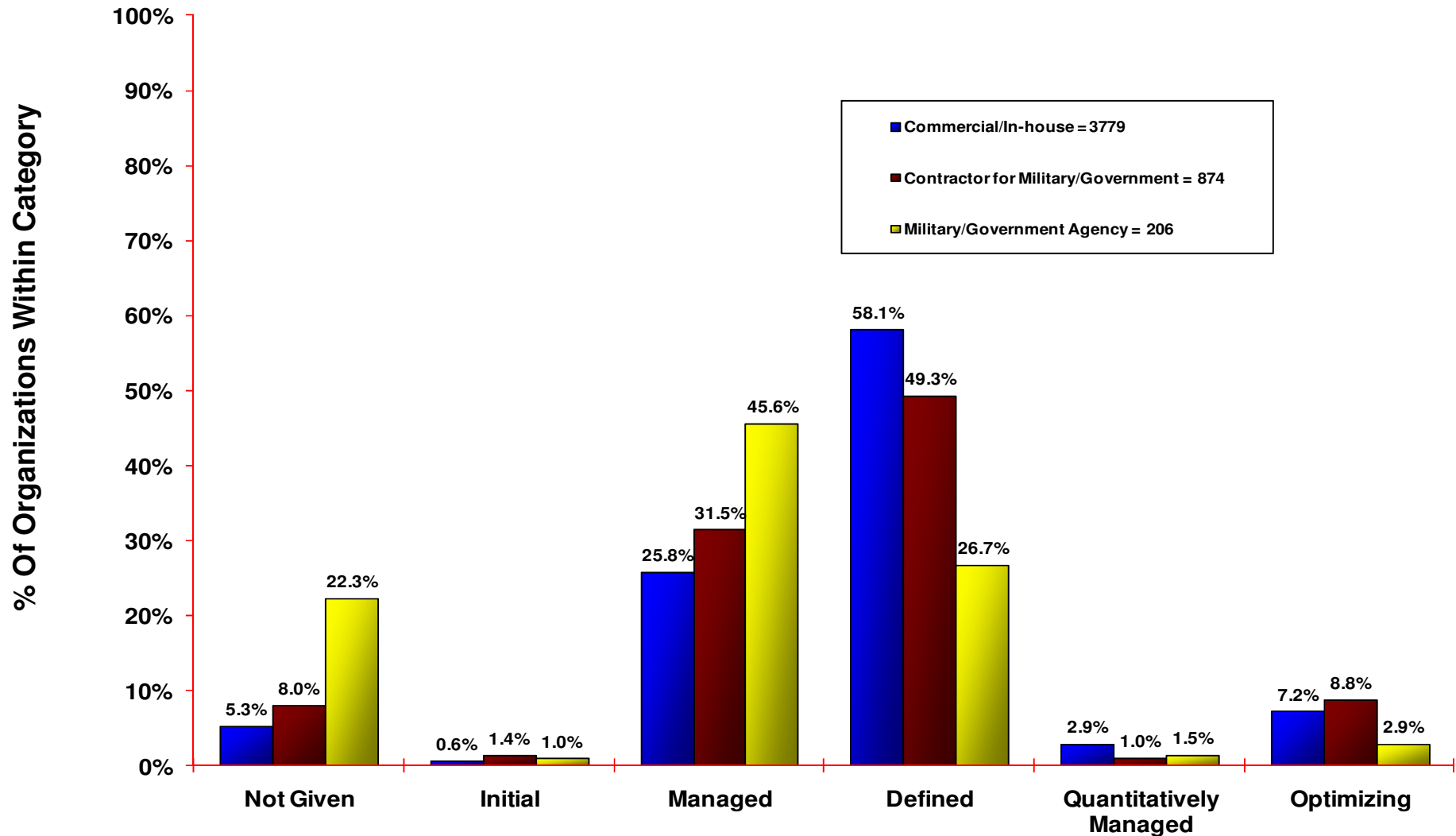
Reporting Organization Categories



Based on 4909 organizations reporting an organization category



Process Maturity Profile by Reporting Organization Categories

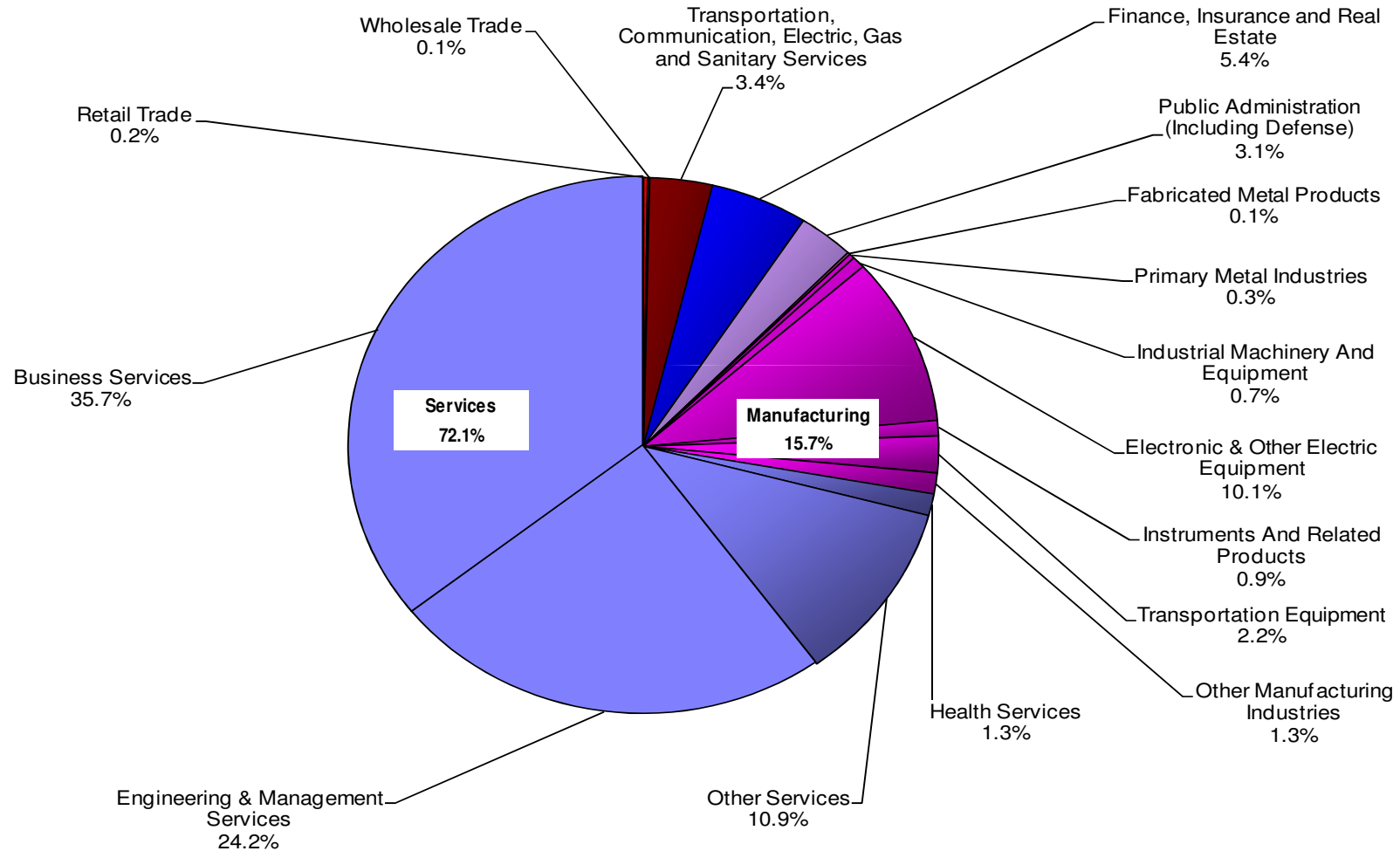


Based on most recent appraisal of 4859 organizations reporting an organization category



Organization Type

Based on Primary Standard Industrial Classification (SIC) Code

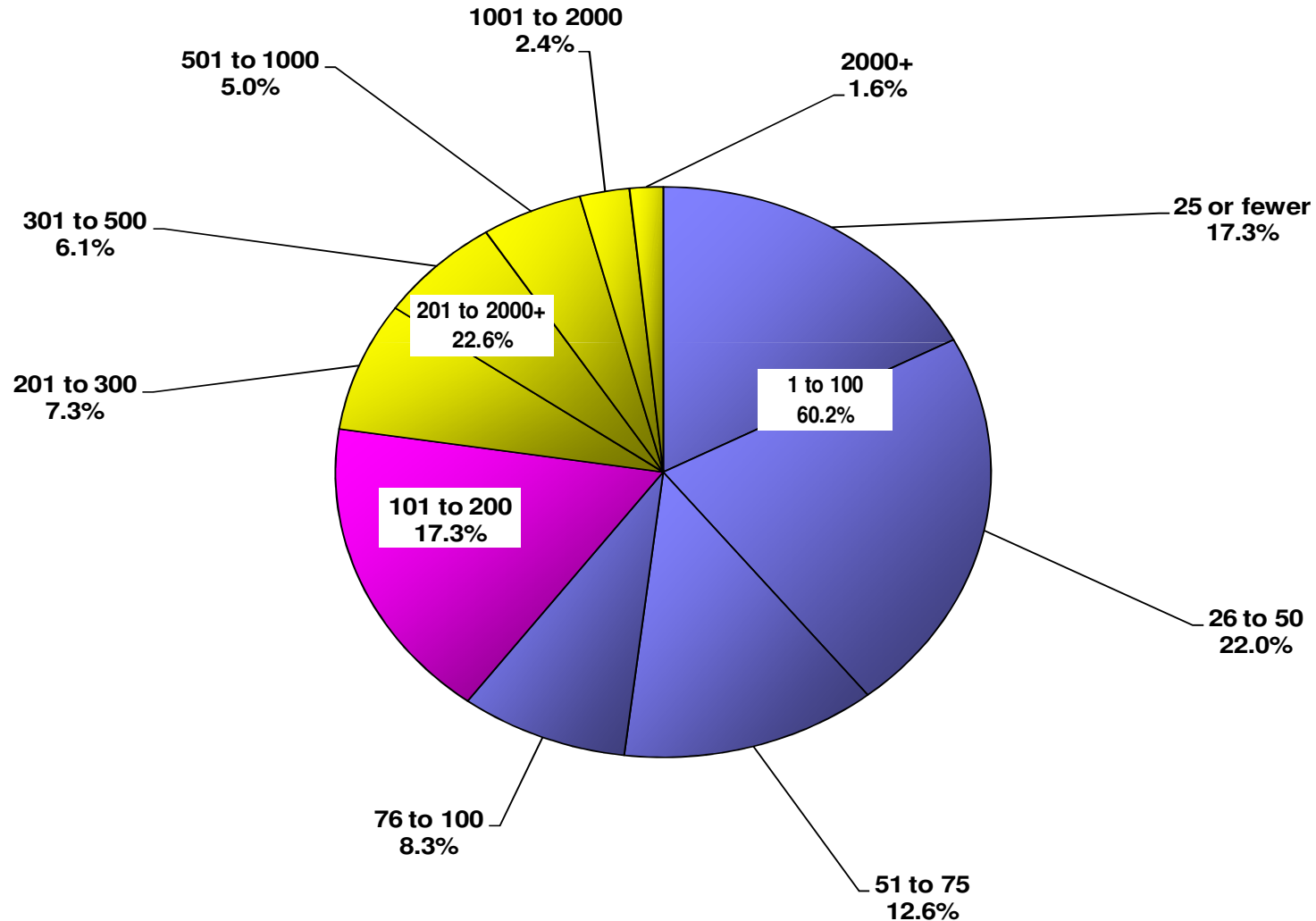


Based on 4222 organizations reporting SIC code. For more information visit: <http://www.osha.gov/oshstats/sicser.html>



Organization Size

Based on the total number of employees within the area of the organization that was appraised

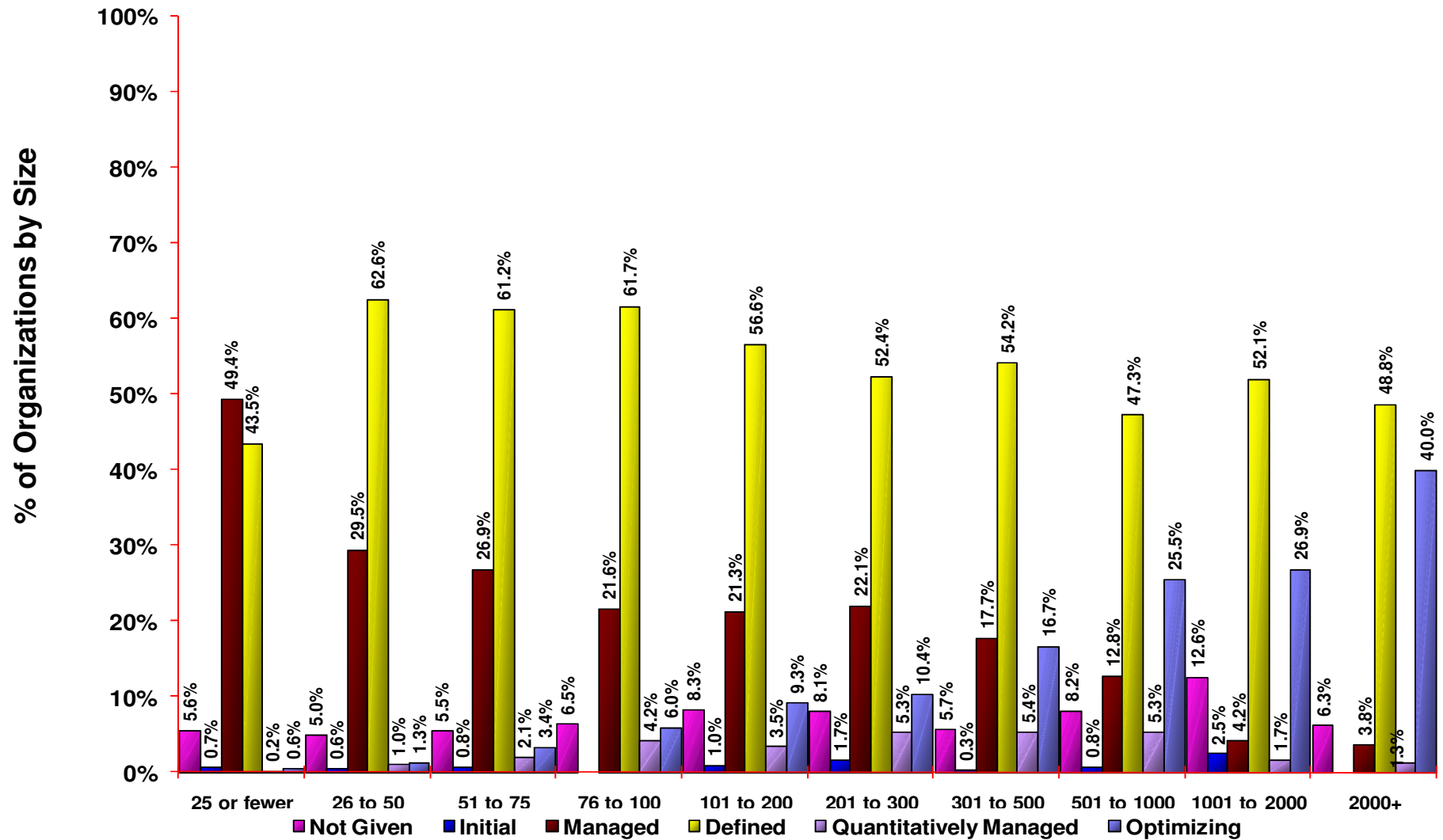


Based on 4863 organizations reporting size data



Maturity Profile by Organization Size

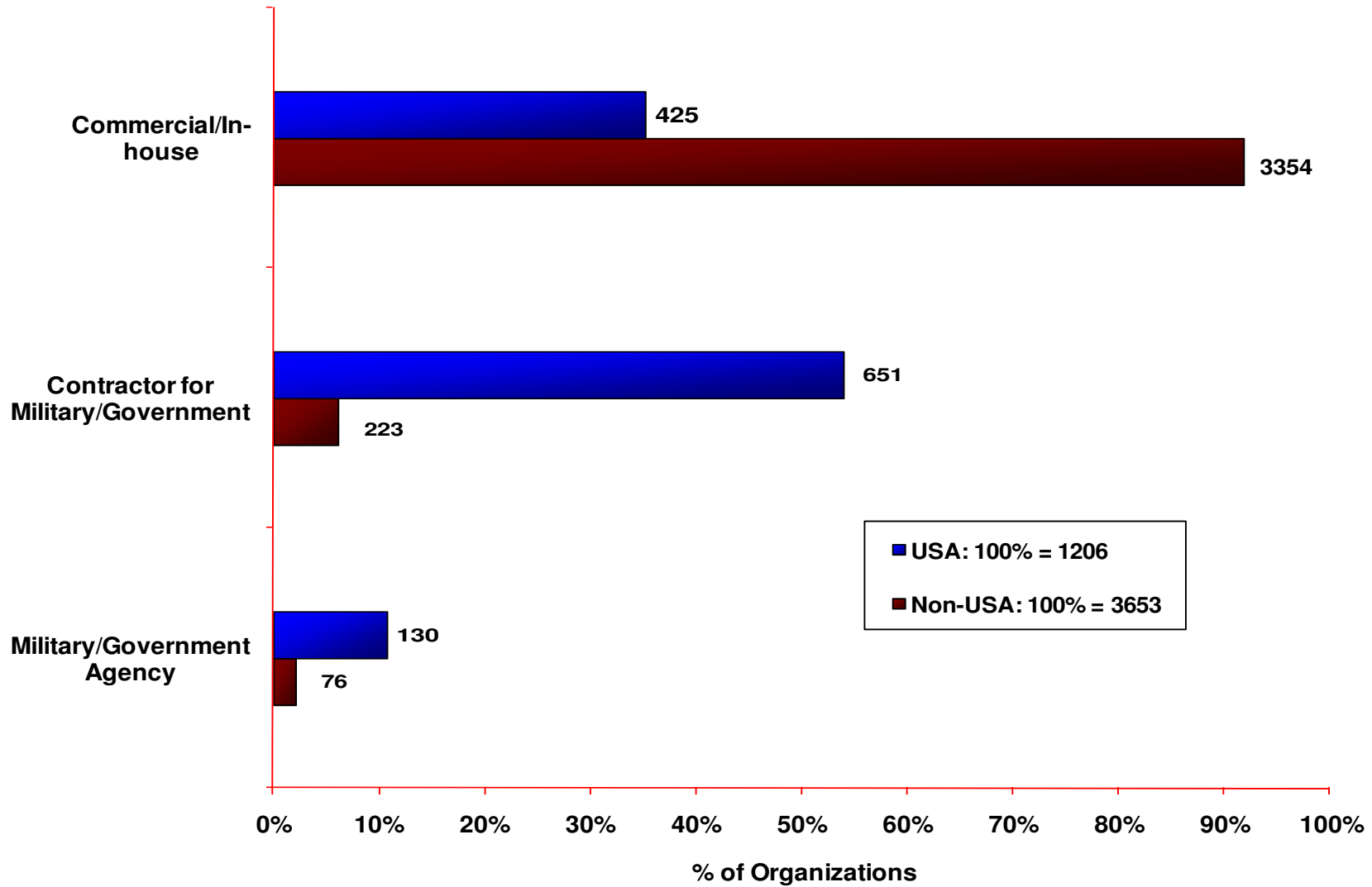
Based on the total number of employees within the area of the organization that was appraised



Based on 4863 organizations reporting size data



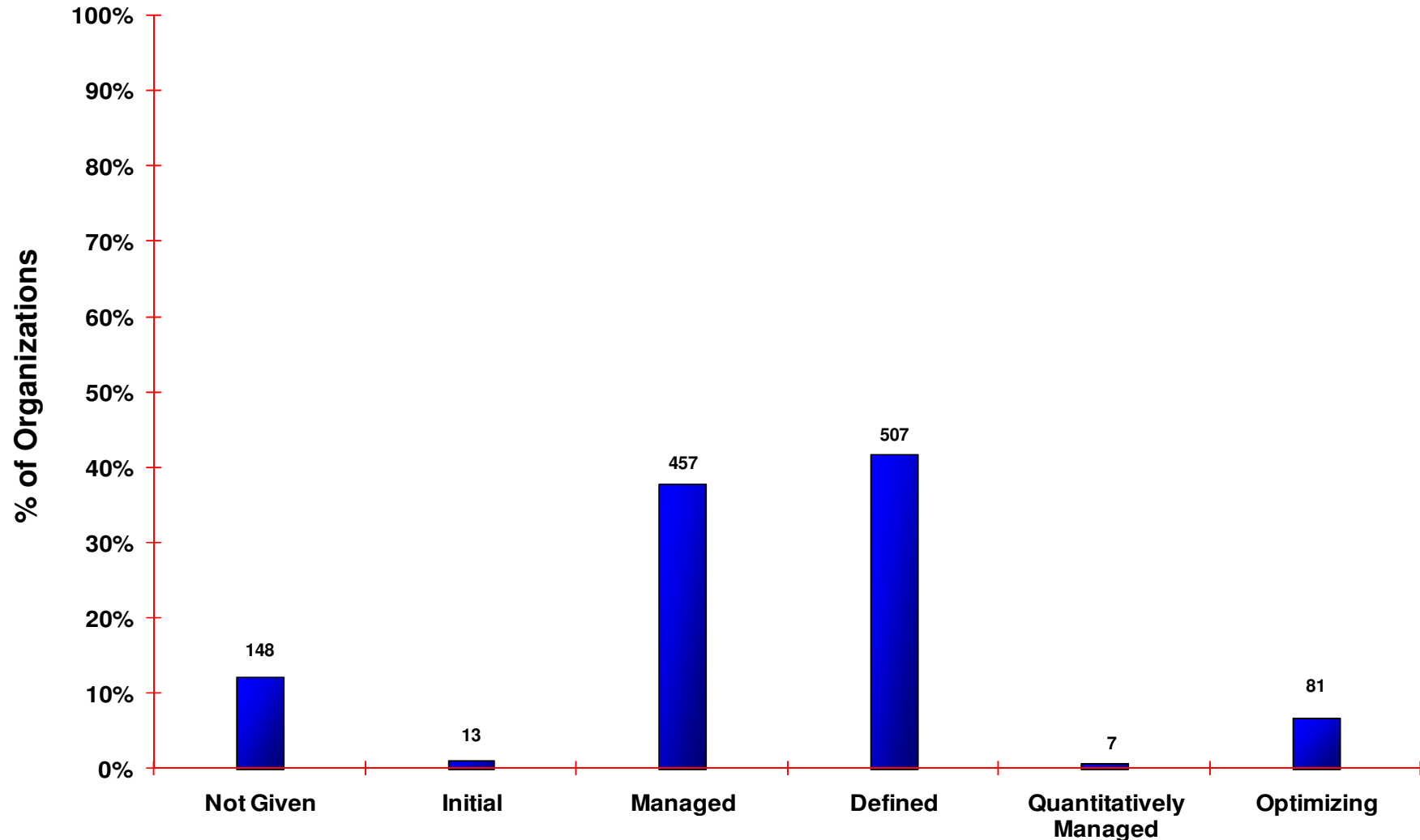
USA and Non-USA Reporting Organization Categories



Based on 1206 USA organizations and 3653 Non-USA organizations reporting an organization category



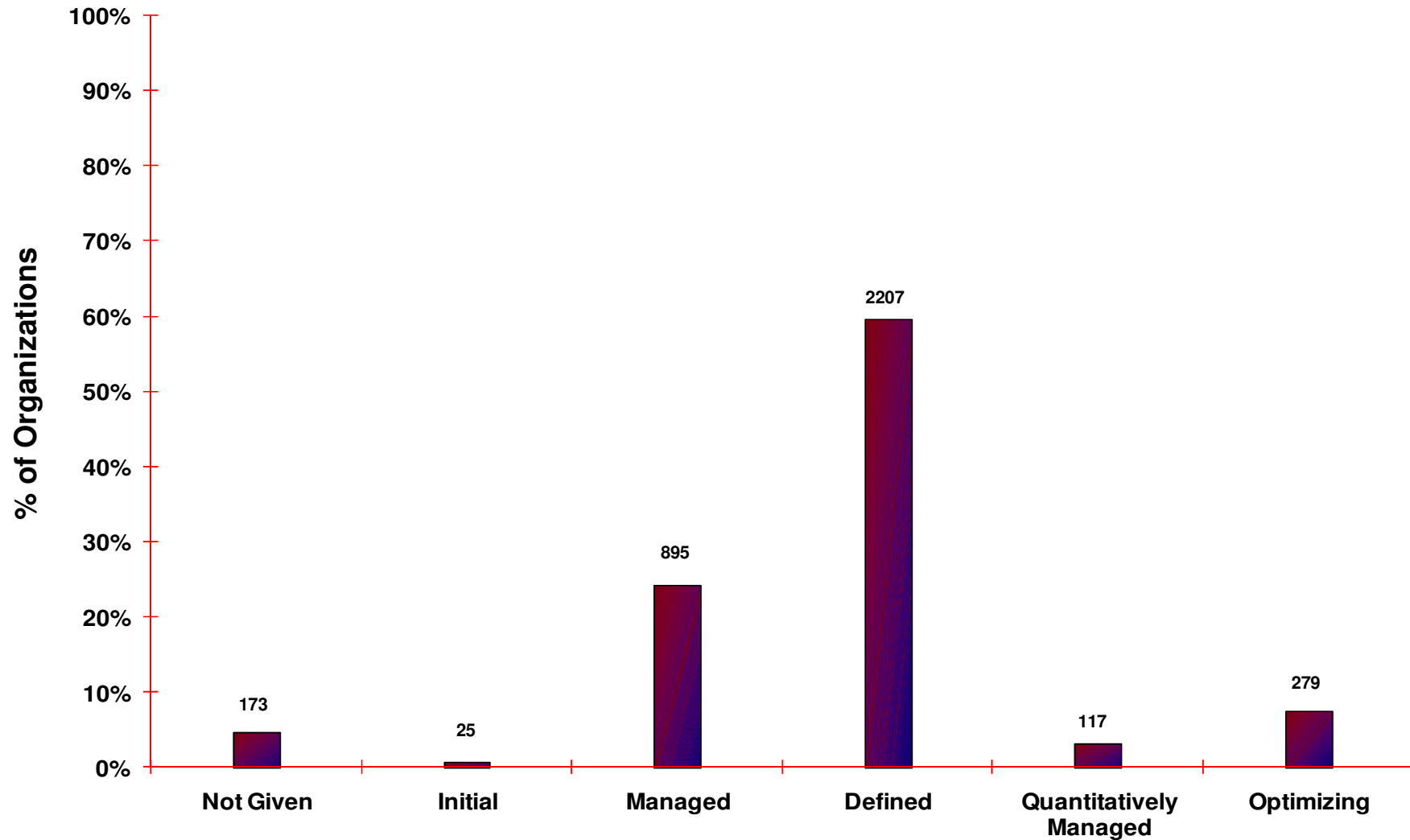
Maturity Profile by All Reporting USA Organizations



Based on 1213 USA organizations



Maturity Profile by All Reporting Non-USA Organizations



Based on 3696 Non-USA organizations



Section 2: Community Trends

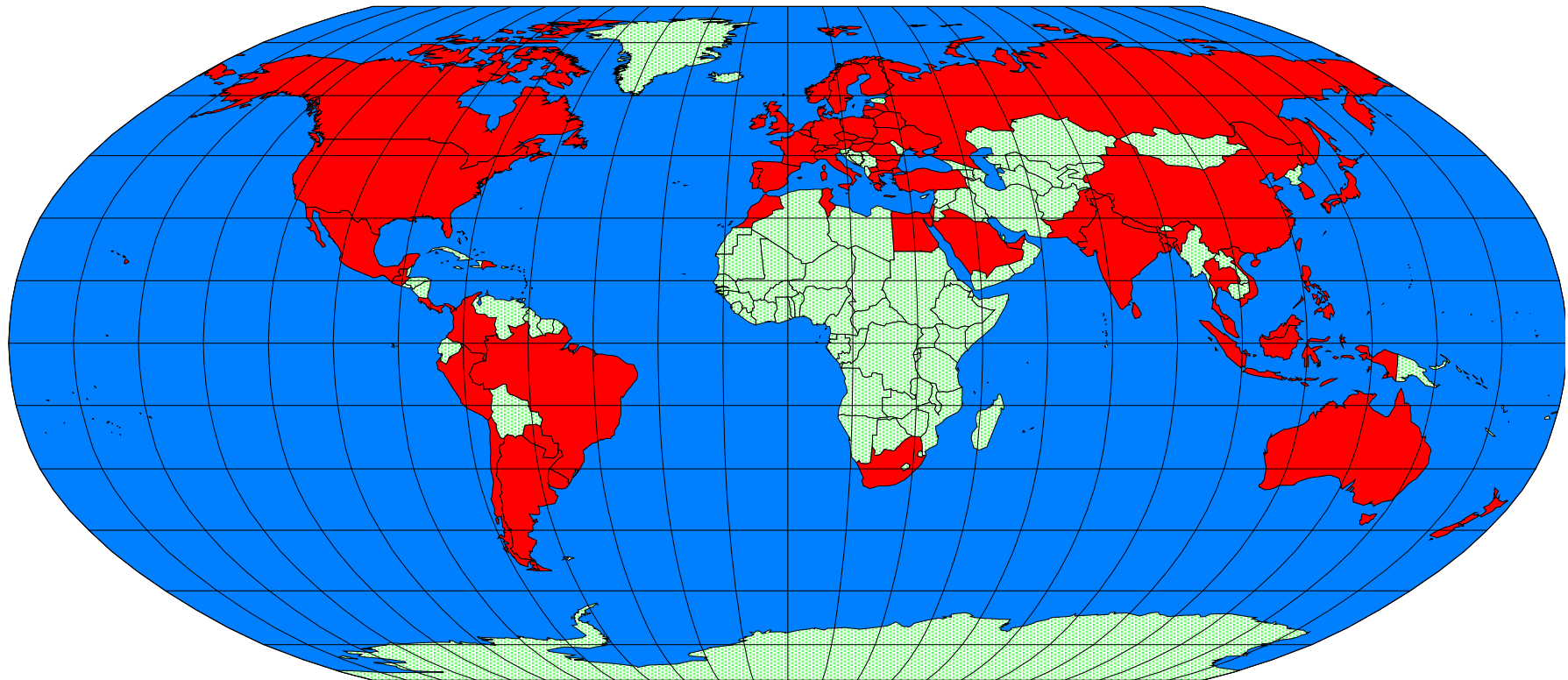
Appraisals conducted through June 2010 and reported to the SEI by July 2010

- **71 Countries reported appraisals**
 - most of the appraisals are from Asia and North America
- **5207 Appraisals posted on PARS**
 - expired appraisals are removed from PARS and replaced with the newest reappraisal result

Please refer to: Terms Used in this Report on page 27



Countries where Appraisals have been Performed and Reported to the SEI

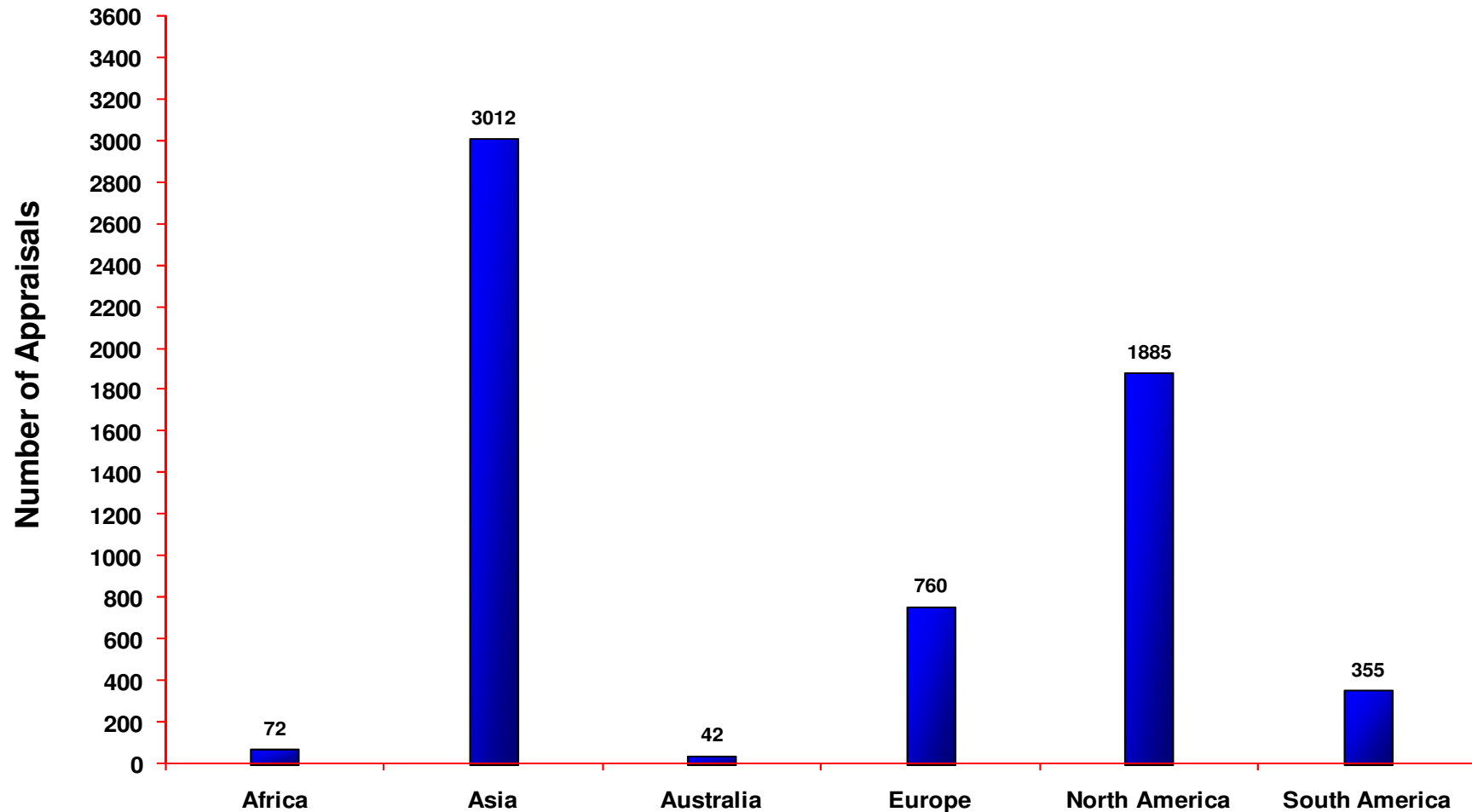


| | | | | | | | |
|--------------------|-------------|----------------------|------------------|---------------|--------------|-----------------|--------------------|
| Argentina | Australia | Austria | Bahrain | Bangladesh | Belarus | Belgium | Brazil |
| Bulgaria | Canada | Chile | China | Colombia | Costa Rica | Czech Republic | Denmark |
| Dominican Republic | Egypt | Finland | France | Germany | Greece | Guatemala | Hong Kong |
| Hungary | India | Indonesia | Ireland | Israel | Italy | Japan | Korea, Republic Of |
| Latvia | Lithuania | Luxembourg | <i>Macedonia</i> | Malaysia | Mauritius | Mexico | Morocco |
| Nepal | Netherlands | New Zealand | Norway | Pakistan | Panama | <i>Paraguay</i> | Peru |
| Philippines | Poland | Portugal | Romania | Russia | Saudi Arabia | Singapore | Slovakia |
| South Africa | Spain | Sri Lanka | Sweden | Switzerland | Taiwan | Thailand | Tunisia |
| Turkey | Ukraine | United Arab Emirates | United Kingdom | United States | Uruguay | Viet Nam | |

* Red/Italic country name: New additions with this reporting since March 2010



Number of Appraisals Reported to the SEI by Continent



Based on 6126 appraisals

* North America includes Canada, the USA, and Mexico; South America includes Central America and the Caribbean ; Australia includes New Zealand

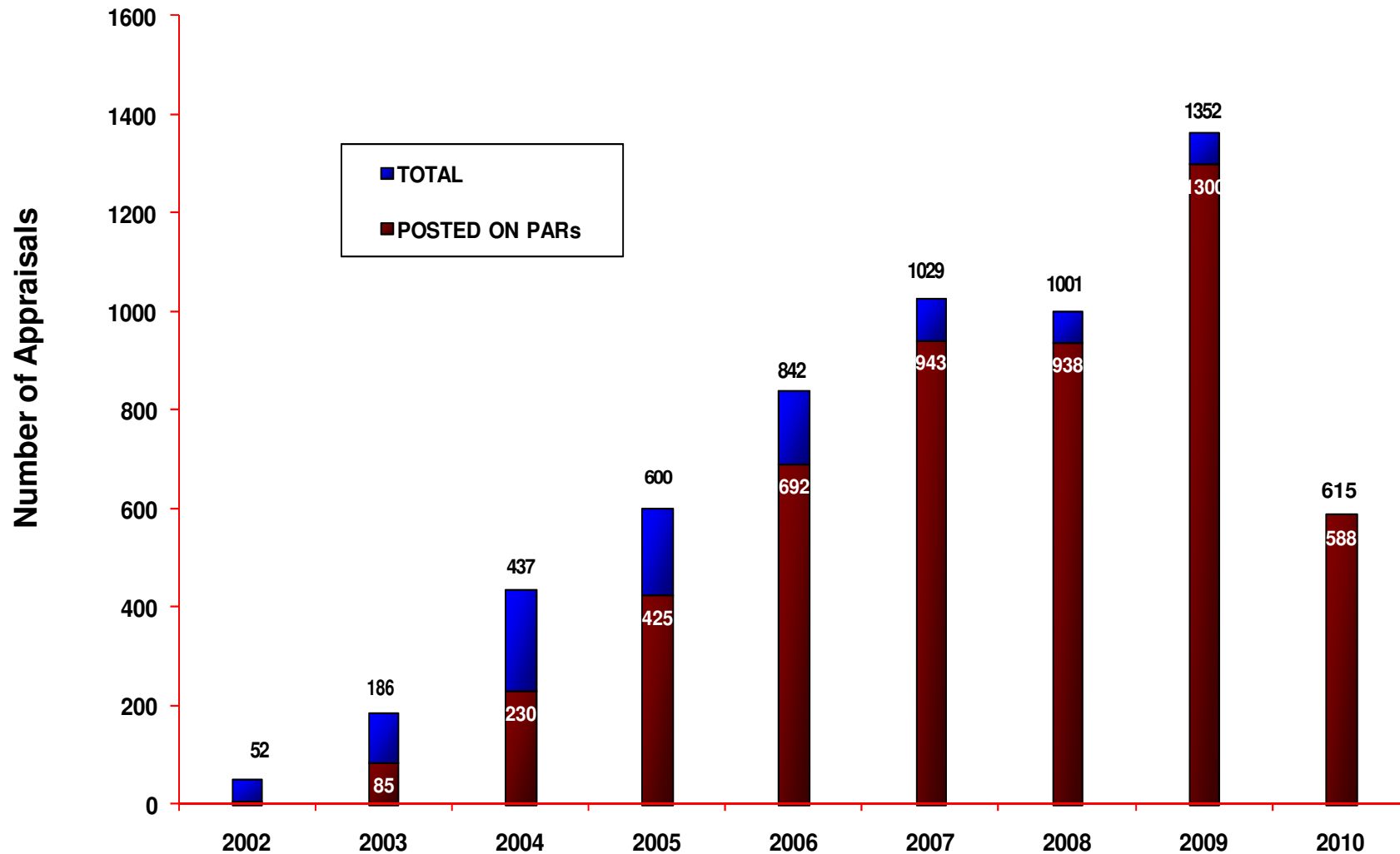


Number of Appraisals and Maturity Levels Reported to the SEI by Country

| Country | Number of Appraisals | Maturity Level 1 Reported | Maturity Level 2 Reported | Maturity Level 3 Reported | Maturity Level 4 Reported | Maturity Level 5 Reported | Country | Number of Appraisals | Maturity Level 1 Reported | Maturity Level 2 Reported | Maturity Level 3 Reported | Maturity Level 4 Reported | Maturity Level 5 Reported |
|--------------------|----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------------|----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Argentina | 79 | | 50 | 20 | 2 | 4 | Malaysia | 74 | | 22 | 46 | | 6 |
| Australia | 39 | 1 | 10 | 7 | 2 | 4 | Mauritius | 10 or fewer | | | | | |
| Austria | 10 or fewer | | | | | | Mexico | 104 | | 43 | 47 | 4 | 8 |
| Bahrain | 10 or fewer | | | | | | Morocco | 10 or fewer | | | | | |
| Bangladesh | 10 or fewer | | | | | | Nepal | 10 or fewer | | | | | |
| Belarus | 10 or fewer | | | | | | Netherlands | 15 | | 5 | 7 | | 1 |
| Belgium | 10 or fewer | | | | | | New Zealand | 10 or fewer | | | | | |
| Brazil | 167 | 1 | 89 | 62 | 1 | 11 | Norway | 10 or fewer | | | | | |
| Bulgaria | 10 or fewer | | | | | | Pakistan | 29 | 1 | 22 | 4 | | 1 |
| Canada | 62 | 1 | 17 | 25 | 5 | 4 | Panama | 10 or fewer | | | | | |
| Chile | 43 | | 25 | 15 | | 2 | Paraguay | 10 or fewer | | | | | |
| China | 1475 | 1 | 142 | 1213 | 44 | 51 | Peru | 11 | | 5 | 6 | | |
| Colombia | 43 | | 14 | 15 | 4 | 4 | Philippines | 26 | | 3 | 12 | 1 | 8 |
| Costa Rica | 10 or fewer | | | | | | Poland | 10 or fewer | | | | | |
| Czech Republic | 10 or fewer | | | | | | Portugal | 14 | | 5 | 7 | | 1 |
| Denmark | 10 or fewer | | | | | | Romania | 10 or fewer | | | | | |
| Dominican Republic | 10 or fewer | | | | | | Russia | 11 | | | 3 | 3 | 4 |
| Egypt | 52 | 1 | 25 | 18 | 2 | 3 | Saudi Arabia | 10 or fewer | | | | | |
| Finland | 10 or fewer | | | | | | Singapore | 22 | | 4 | 12 | 1 | 4 |
| France | 183 | 4 | 108 | 56 | 1 | 2 | Slovakia | 10 or fewer | | | | | |
| Germany | 80 | 9 | 40 | 15 | 1 | 1 | South Africa | 10 or fewer | | | | | |
| Greece | 10 or fewer | | | | | | Spain | 198 | 1 | 117 | 61 | 3 | 5 |
| Guatemala | 10 or fewer | | | | | | Sri Lanka | 14 | | 2 | 12 | | |
| Hong Kong | 20 | | 4 | 11 | | 5 | Sweden | 10 or fewer | | | | | |
| Hungary | 10 or fewer | | | | | | Switzerland | 10 or fewer | | | | | |
| India | 576 | | 19 | 320 | 25 | 197 | Taiwan | 147 | 1 | 81 | 58 | 3 | 2 |
| Indonesia | 10 or fewer | | | | | | Thailand | 41 | | 13 | 25 | | 2 |
| Ireland | 11 | | 2 | 4 | | | Tunisia | 10 or fewer | | | | | |
| Israel | 21 | | 3 | 11 | | 4 | Turkey | 19 | | | 16 | | 3 |
| Italy | 46 | | 19 | 23 | | | Ukraine | 10 or fewer | | | | | |
| Japan | 324 | 19 | 88 | 146 | 16 | 17 | United Arab Emirates | 10 or fewer | | | | | |
| Korea, Republic Of | 176 | 1 | 59 | 78 | 19 | 8 | United Kingdom | 118 | 3 | 52 | 36 | 1 | 4 |
| Latvia | 10 or fewer | | | | | | United States | 1719 | 30 | 611 | 683 | 23 | 149 |
| Lithuania | 10 or fewer | | | | | | Uruguay | 10 or fewer | | | | | |
| Luxembourg | 10 or fewer | | | | | | Viet Nam | 18 | | | 13 | 2 | 3 |
| Macedonia | 10 or fewer | | | | | | | | | | | | |



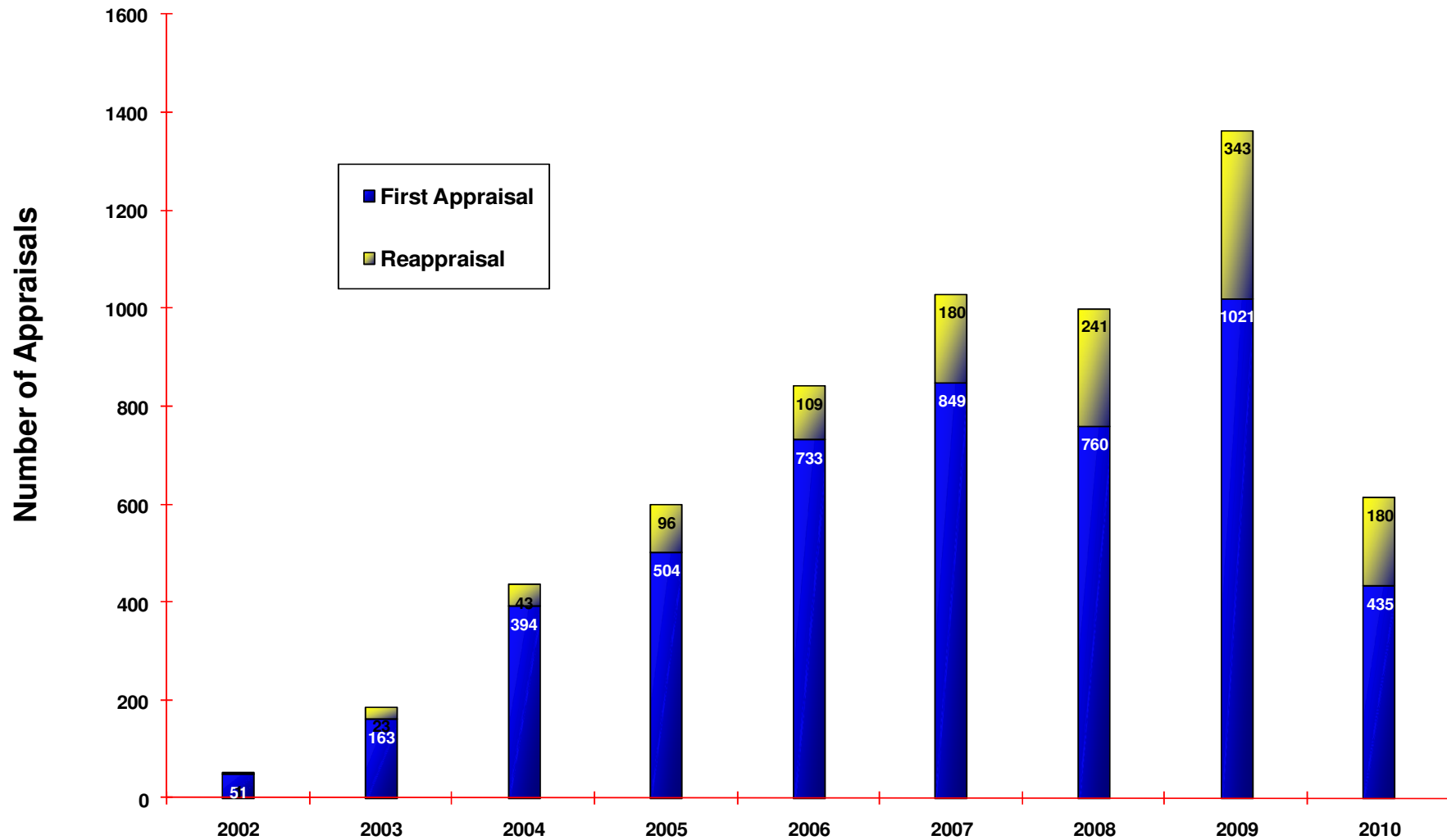
Number of SCAMPI A Appraisals Reported to SEI by Year



Based on 6126 appraisals



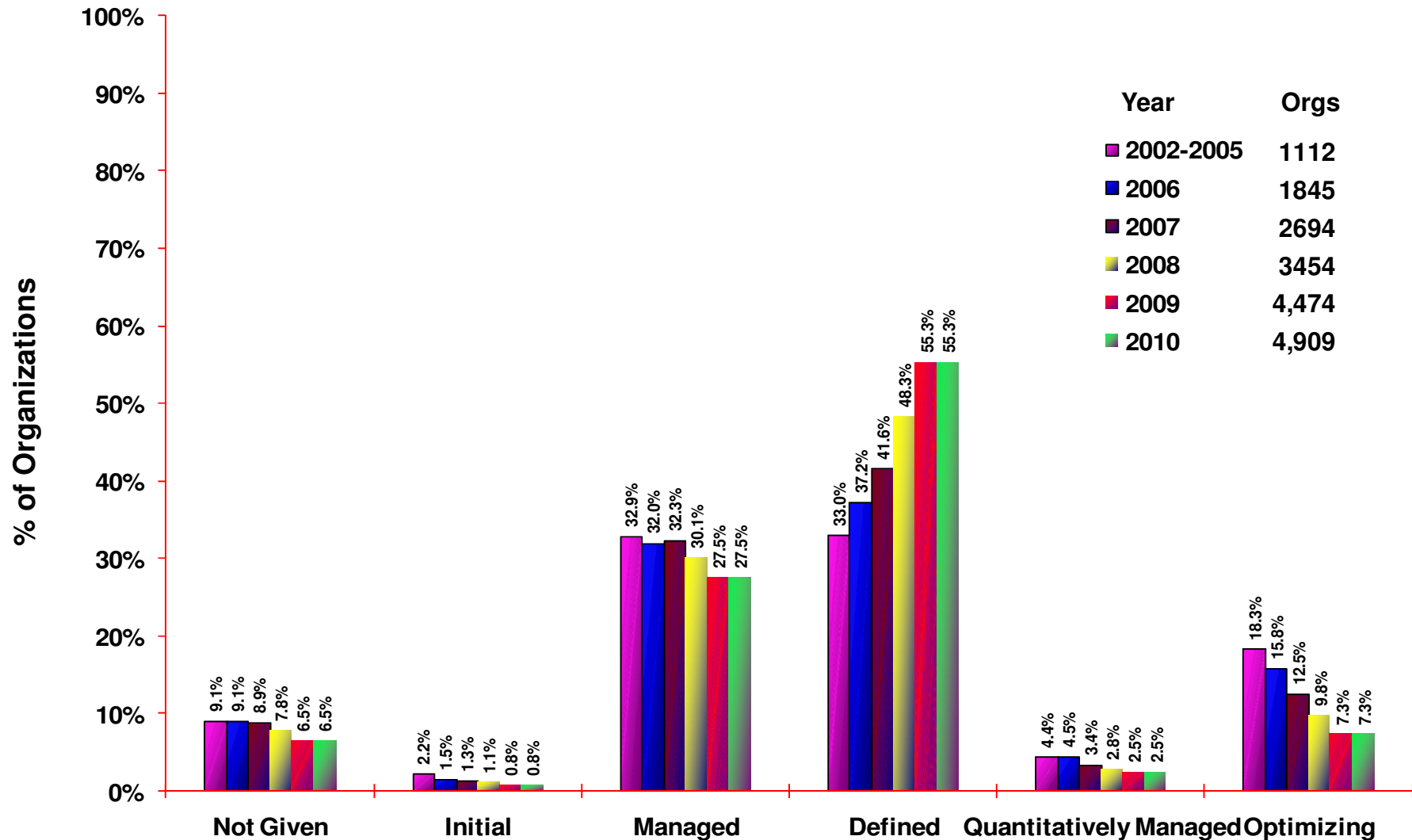
Number of SCAMPI A Appraisals Reported to SEI by Year



Based on 6126 appraisals



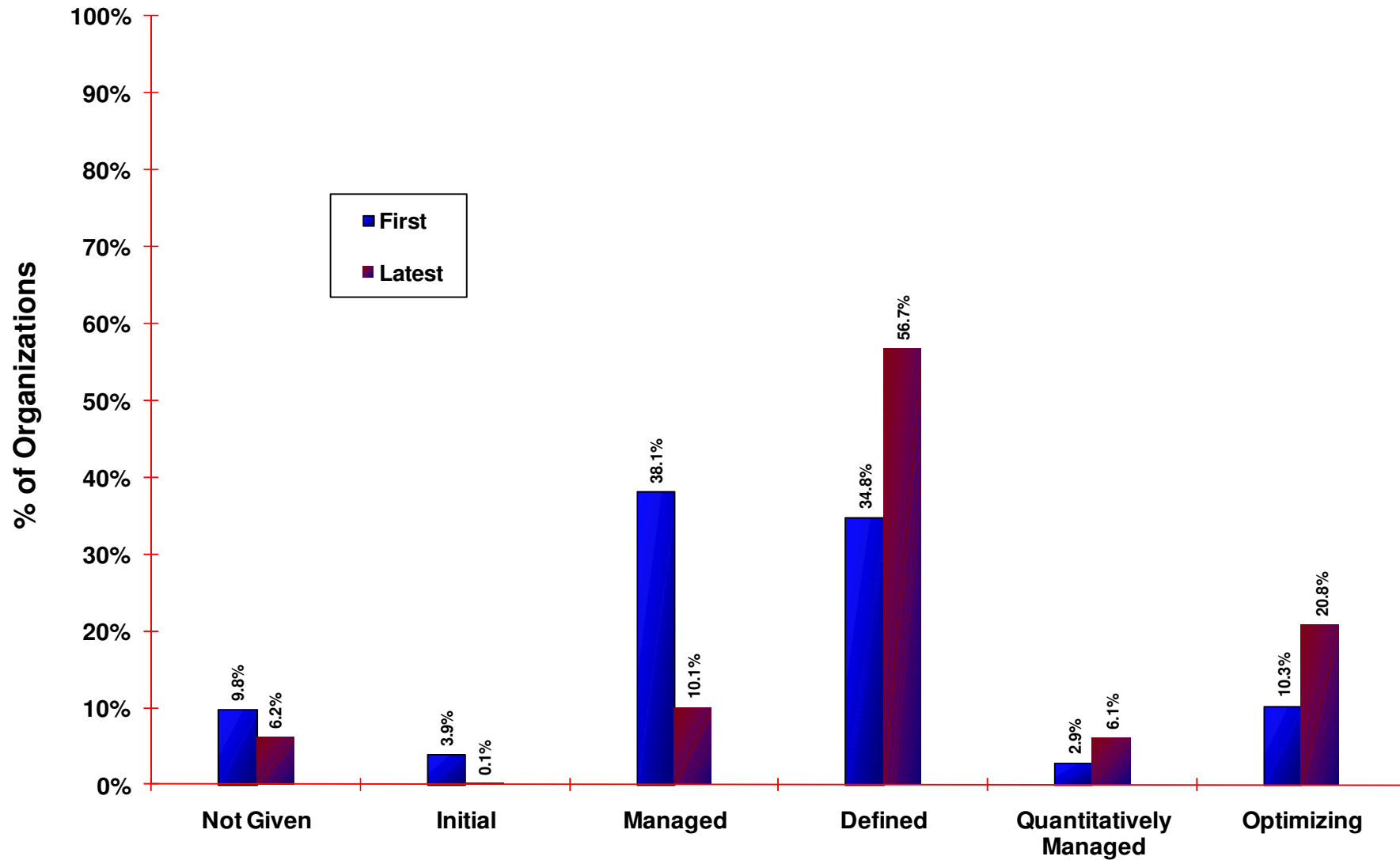
Trends in the Community Maturity Profile



Based on a cumulative view of the most recent appraisals of organizations up through the year indicated



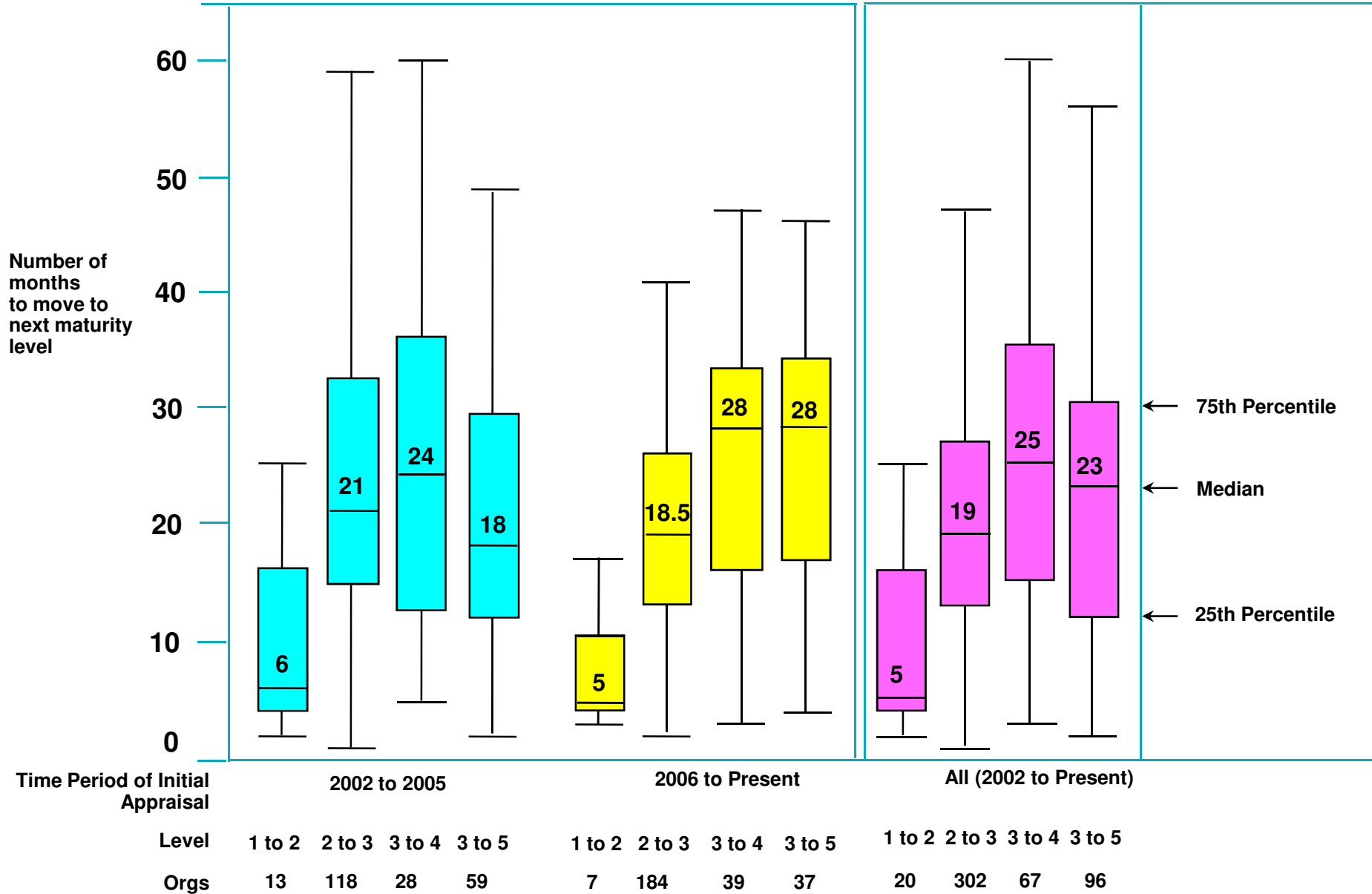
Maturity Level of First and Latest CMMI Appraisal



Based on 957 reappraised organizations using their first and latest appraisal



Time to Move Up





Summary

6126 appraisals have been reported to the SEI Since 2002

Brazil, Mexico, Chile, Colombia, Egypt, Taiwan reported appraisals are increasing at a rapid rate

More than 60% of appraised organizational units have 100 or fewer employees

The percentage of appraised organizations with a unit size 100 or fewer employees is increasing steadily

The majority of reported appraisals are Maturity level 2 and 3 organizations



Summary - 2

For organizations that began their CMMI-based SCAMPI effort in 2002 or later, the median time to move from:

- **maturity level 1 to 2 is 5 months**
- **maturity level 2 to 3 is 19 months**
- **maturity level 3 to 4 is 25 months**
- **maturity level 3 to 5 is 23 months**

Note:

Since the March 2009 report, the median time to move from maturity level 1 to 2 increased from 4.5 months to 5 months. The median time to move from maturity level 3 to 4 increased from 24 months to 25 months , the median time to move from maturity level 3 to 5 increased from 19 months to 23 months



Terms Used in this Report

- Company** - Parent of the appraised entity
A company can be a commercial or non-commercial firm, for-profit or not for-profit business, a research and development unit, a higher education unit, a government agency, or branch of service, etc.
- Organization** - a.k.a. Appraised entity
The organization unit to which the appraisal results apply. An appraised entity can be the entire company, a selected business unit, units supporting a particular product line or service, etc.
- Non-USA** - Appraised entity whose geographic location is not within the United States. The parent of the appraised entity may or may not be based within the United States.
- PARS** - Published Appraisal Results webpage contains CMMI® appraisals published at the request of the appraisal sponsor.
The link is: <http://sas.sei.cmu.edu/pars/>



Report your Appraisal Results to the SEI

The briefing is only possible due to the cooperation of organizations and individuals sending in their appraisal results to the SEI

In order to provide this information and service in the future, it will depend on this continued cooperation

Please visit:

<http://www.sei.cmu.edu/cmml/casestudies/profiles/cmml.cfm>

for forms, information, and instructions on how to report appraisals to the SEI



Contact Information

Please visit:

<http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm>

and review the information provided before contacting:

| | |
|------------------------|----------------|
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