

# BKCASE: Successful transition

**Prof. Dave Olwell**

**5<sup>th</sup> Annual SERC Sponsor Research Review**

**February 25, 2014**

**Georgetown University**

**Hotel and Conference Center**

**Washington, DC**

**[www.sercuarc.org](http://www.sercuarc.org)**

- The Body of Knowledge and Curriculum to Advance Systems Engineering (BKCASE) project, initiated in 2009, delivered two products to the SE community in 2012:

①



Guide to the Systems Engineering  
Body of Knowledge

②



Graduate Reference Curriculum  
for Systems Engineering

- 2009 – 2012



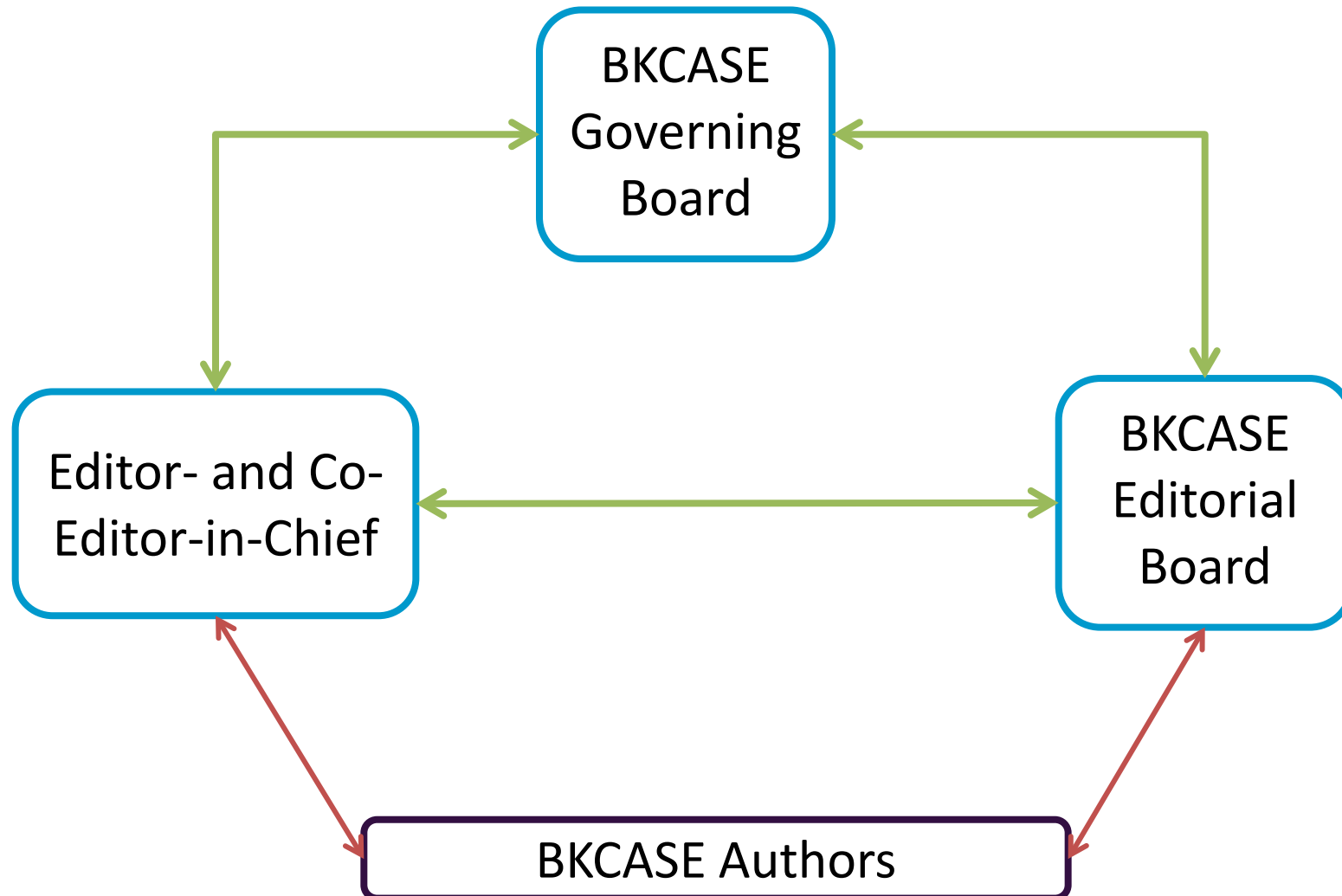
Office of the Deputy Assistant Secretary of Defense (ODASD)  
Systems Engineering



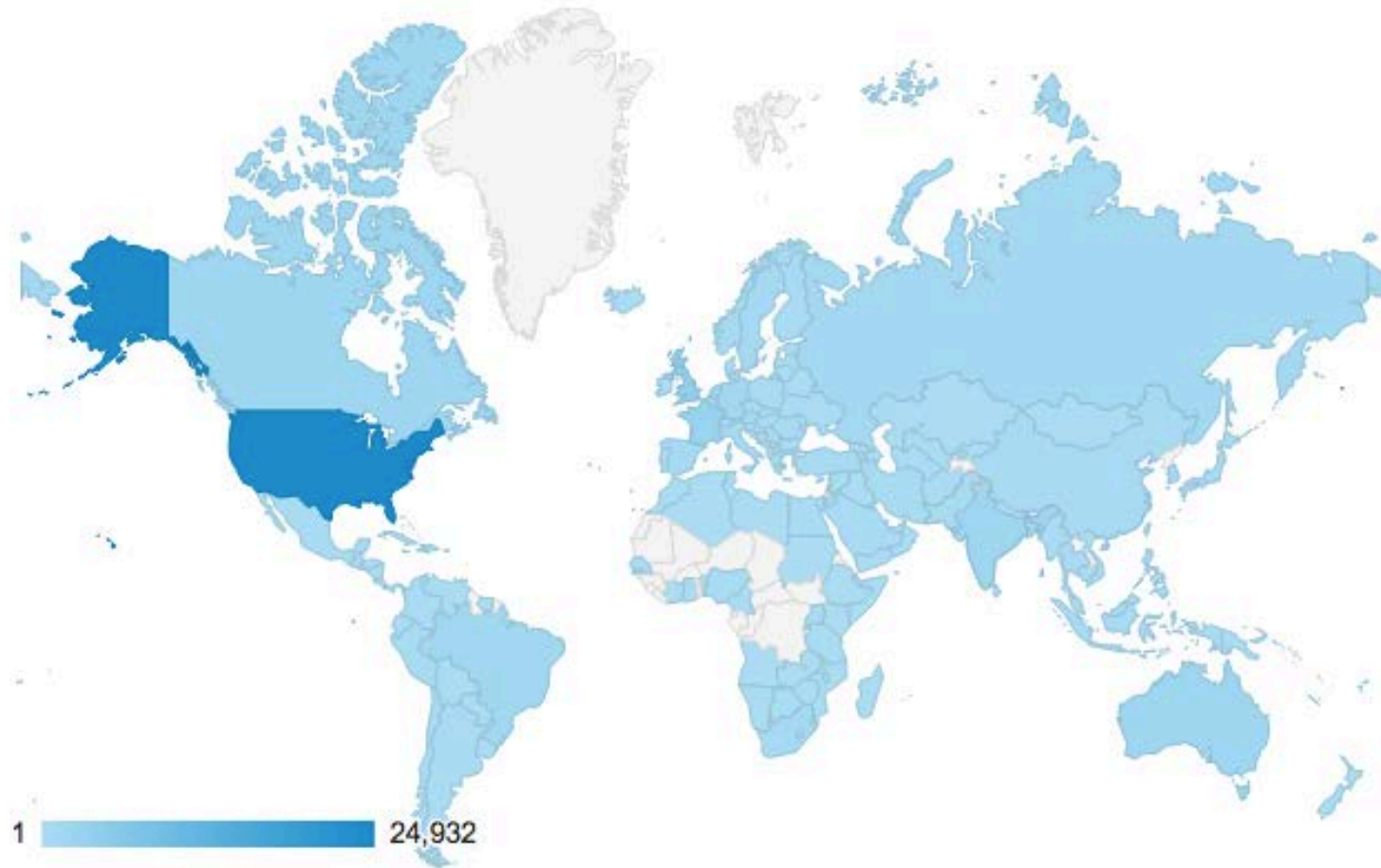
- 2013 -



- 2013 -



## 2013 Usage Statistics



1.	 United States	24,932
2.	 United Kingdom	3,968
3.	 France	2,790
4.	 Australia	1,952
5.	 India	1,931
6.	 Canada	1,900
7.	 Brazil	1,510
8.	 Germany	1,342
9.	 Russia	1,083
10.	 Netherlands	956

Cumulative since SEBoK v. 1.0 release  
 Total visits > **60,000**      Page views > **201,000**

- Co-Steward, along with SERC and IEEE-CS
- Represented in the BKCASE Governing Board
- INCOSE Working Groups review and contribute articles
- INCOSE Handbook sources material from the SEBoK (next version expected later this year)
- SEBoK and GRCSE: **INCOSE Products of the Year 2012**

- They complement each other; information cross-flow
- Nature of content:
  - INCOSE Handbook & IEEE 15288: **Prescriptive**
  - SEBoK: **Descriptive**
- Update cycles:
  - IEEE 15288: **5 to 10 years**
  - INCOSE Handbook: **~ 2 years**
  - SEBoK: **2 updates every year**
- Overlap of Authors / Editors
- Influencing each other

- Influencing curricular discussions across the world
- Influential in the design of new curricula in the US and in Italy
- Influencing curricular reviews of existing curricula across US and the world
  - Content checklist and weighting
  - Especially the addition of systems science to SE curricula.
- Informing the discussion of program criteria for graduate systems engineering accreditation
  - Used in the UK for the review of the Cranfield program by the UK Council on Engineering



- OSD funded the initial phase on the expectation sustainment would be transitioned to professional societies
  - This has occurred and is working. New governance structure and funding models in place. New EIC selected and installed.
- OSD desired to positively influence the practice of SE through BKCASE
  - This has also occurred. Influencing standards, handbooks, and curricula world-wide.
- Products were delivered on time and on budget, and exceeded expectations for quality and content.
- Conclusions:
  - Success for RT1!
  - Follow-on projects (e.g. SEEK) likely to be equally as successful