

## References

- 001 AngloAmerican, (2013), AngloAmerican, Annual Report, 2013. [ONLINE] Available at [http://www.angloamerican.com/~media/Files/A/Anglo-American-Plc/reports/annual-report-2013/annual-report2013.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwj-\\_6hmM3NAhWGC8AKHXVACdAQFggTMAA&usg=AFQjCNFaaZBrUKIC-AWSVzD-5WfKCRToEw](http://www.angloamerican.com/~media/Files/A/Anglo-American-Plc/reports/annual-report-2013/annual-report2013.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwj-_6hmM3NAhWGC8AKHXVACdAQFggTMAA&usg=AFQjCNFaaZBrUKIC-AWSVzD-5WfKCRToEw). [Accessed 29 June 2016]
- 002 Archibald, R., Di Filippo, I., Di Filippo, D. "The Six Phase Comprehensive Project Life Cycle Model Includes the Project Incubation-Feasibility Phase and the Post-Project Evaluation Phase," December 2012 issue of PM World Journal.
- 003 Ashby, R.W., (1956) Introduction to cybernetics. London: Chapman & Hall.
- 004 Baccarini, D. (1996). The Concept of Project Complexity – A Review. International Journal of Project Management. Vol. 14(4), pp. 201-204.
- 005 Bahil, A., Henderson, S. (2004). Requirements Development, Verification, and Validation Exhibited in Famous Failures. Wiley InterScience [Online] Available at: <http://www.sie.arizona.edu/MURI/cd/content/Bahill%20Henderson%20Req,%20Dev,%20Verif,%20and%20Validation%20Exhibited%20in%20Famous%20Failures%20Thrust-clarify.pdf>. [Accessed 25 June 2016]
- 006 Banner, D.K., Gagne, T.E., Designing effective organizations. Traditional and Transformational views. (1995), Thousand Oaks, CA: Sage. 480 pages (1995) Organization Studies, 16(4), pp. 725–725. doi: 10.1177/017084069501600423.
- 007 Banner, K., Gane, T. (1995). Designing Effective Organizations: Traditional and Transformative views. Sage Journals. California: Thousand Oaks.
- 008 Barry, M., Fourie McIntosh, C. (2001). "Wicked problems, soft systems and cadastral systems in periods of uncertainty". Proceedings of CONSAS, Cape Town, South Africa, 12-14 March, 2001, 7 pages
- 009 Baruch, Y., Holtom, B.C. (2008) 'Survey response rate levels and trends in organizational research', Human Relations, 61(8), pp. 1139–1160
- 010 Bar-Yam, Y., (2014). When Systems Engineering Fails – Toward Complex Systems Engineering. International Journal of System of Systems Engineering, p. 2
- 011 Becker, F. (2002). Organisational dilemmas and workplace solutions. Journal of Corporate Real Estate. Vol. 4(2). pp 129-149
- 012 Beer, S, (1972). Brain and Firm. 1<sup>st</sup> Ed. London: Alan Lane
- 013 Berson, T., Mazzuchi, T., Sarkani, S. (2012). A Framework for Application of Systems Engineering Process Models to Sustainable Design of High Performance Buildings. Journal of Green Building. Vol. 7(3).
- 014 Bertelsen, S, (2004). Construction Management in a Complexity Perspective. In 1st International SCRI Symposium. University of Salford, UK, March 30th – 31st. UK:1-7
- 015 BKCASE Editorial Board. (2011). The Guide to the Systems Engineering Body of Knowledge (SEBoK), v. 0.5. R.D. Adcock (EIC). Hoboken, NJ: The

- Trustees of the Stevens Institute of Technology. [Accessed June 28, 2016] [www.sebokwiki.org](http://www.sebokwiki.org).
- 016 BKCASE Editorial Board. (2015). The Guide to the Systems Engineering Body of Knowledge (SEBoK), v. 1.5. R.D. Adcock (EIC). Hoboken, NJ: The Trustees of the Stevens Institute of Technology. [Accessed June 28, 2016]. [www.sebokwiki.org](http://www.sebokwiki.org).
- 017 Blanchard, B.S., (2012). System Engineering Management. 4<sup>th</sup> Ed. New Jersey: Wiley and Sons
- 018 Boone, W.J., Staver, J.R., Yale, M. (2012) Rasch Analysis in the Human Sciences. USA: Springer.
- 019 Bourne, L., (2010). Stakeholder Relationship Management and the Stakeholder Circle. 1<sup>st</sup> Ed. Saarbruken: Lambert Academic Publishing
- 020 Braun, V., Clarke, V., (2009). Using thematic analysis in psychology. *Qualitative Research in Psychology*, [Online]. Vol. 3, Issue 2, 77-101. Available at: <http://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa>
- 021 Bryson, J.M., Cunningham, G.L., Lokkesmoe K.J, (2002). What to do when stakeholders matter: the case of problem formulation for the African American men project of Hennepin county. *Review* 62 , pp. 568-584
- 022 Bullen, J., (2001). Making Project Management Work A Critical Assessment of the Key Elements of Successful Project Management. [ONLINE] Available at: [https://www.researchgate.net/publication/237556727\\_Making\\_Project\\_Manage](https://www.researchgate.net/publication/237556727_Making_Project_Manage). [Accessed 29 June 2016].
- 023 Buttrick, R., (2005). Project Workout. 3<sup>rd</sup> Ed. London: FT Prentice Hall.
- 024 Checkland, P. (2000) 'Soft systems methodology: A thirty year retrospective, *Systems Research and Behavioral Science*, 17(S1), pp. S11–S58. doi: 10.1002/1099-1743(200011)17:1+<::aid-sres374>3.0.co;2-o.
- 025 Checkland, P., Scholes, J. (1999). *Soft System Methodology: A 30 year retrospective*. Michigan: Wiley.
- 026 Checkland, P., Checkl, P.B. (1981) *Systems thinking, systems practice*. New York: John Wiley & Sons.
- 027 Checkland, P., Scholes, J. (1990). *Soft systems methodology in action*. Chichester, Great Britain: John Wiley & Sons.
- 028 Clancy, T. (1995, 2014). The Standish Group Report. [ONLINE] Available at: <https://www.projectsmaart.co.uk/white-papers/chaos-report.pdf>. [Accessed 25 June 2016]
- 029 Cleland, D., Ireland L. (2002). *Project Management: Strategic Design and Implementation*. McGraw-Hill, pp. 4-7, 67-69.
- 030 Cooke-Davies, T., Patton, L.C. (2011). *Aspects of complexity: Managing projects in a complex world*. United States: Project Management Institute.
- 031 Cram101 Textbook Reviews. (2009). *Project Management in a Complex World*. Cram101 Textbook reviews. Available at: <http://www.saylor.org/books>. [Accessed 25 June 2016]
- 032 Creswell, J. W., Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*. Vol. 39(3), pp. 124-131.

- 033 Cushman, M., Venters, W., Cornford, T., Mitev, N. (2002). "Understanding sustainability as knowledge practice". Presented to British Academy of Management Conference: Fast-Tracking Performance through Partnerships, London, UK.
- 034 Custer, R. L., Scarcella, J. A., Stewart, B. R. (1999). The modified Delphi technique: A rotational modification. *Journal of Vocational and Technical Education*. Vol. 15 (2), pp. 1-10.
- 035 Deloitte & Touche. (2012). Effective Operational Readiness of Large Mining Capital Projects. [ONLINE] Available at: [http://www.google.co.za/url?url=http://deloitteblog.co.za/files/icp/Effective\\_Operational\\_Readiness.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUK Ewj3nb3xl83NAhVrDsAKHa9WCe8QFggTMAA&usg=AFQjCNFEIOLzyqqJGRI0LQobaApoLn2q8A](http://www.google.co.za/url?url=http://deloitteblog.co.za/files/icp/Effective_Operational_Readiness.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUK Ewj3nb3xl83NAhVrDsAKHa9WCe8QFggTMAA&usg=AFQjCNFEIOLzyqqJGRI0LQobaApoLn2q8A). [Accessed 29 June 2016]
- 036 Ed, R. (n.d.) Overview of the System Engineering Process. Available at: <https://www.dot.nd.gov/divisions/maintenance/docs/OverviewOfSEA.pdf> [Accessed 28 June 2016]
- 037 Eduardo, D., Y. Sato, C., Dergint, Hatakeyama, K., (2000). Project-Based Organizations as Complex Adaptive Systems. *Project-Based Organizations as Complex Adaptive Systems*, unknown. Vol. 2004, pp. 1-12
- 038 Eisner, E.W., (1991). *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice*. 1<sup>st</sup> Ed. Toronto: University of Michigan
- 039 Ellis, T.J., Levy Y., (2009). Towards a Guide for Novice Researchers on Research Methodology: Review and Proposed Methods. *Issues in Informing Science and Information Technology*. Vol. 6, pp. 1-15
- 040 Engineers Behaving Badly, Zane Scott. (2014). "Engineers Behaving Badly". [Online Video]. 26 February 2014. Available from: [https://www.youtube.com/watch?v=\\_x-zTOiPXTU](https://www.youtube.com/watch?v=_x-zTOiPXTU). [Accessed 29 June 2016].
- 041 Estefan, J, (2008). Survey of Model-Based Systems Engineering (MBSE) Methodologies. INCOSE-TD-2007-003-01, Model Based Systems Engineering (MBSE) Initiative International Council on Systems Engineering (INCOSE). Version B, p. 36
- 042 Flores, L., Fadden, J. (2000). How to Have a Successful Strategic Planning Meeting. *Training and Development*, [Online]. Vol. 54(1). Available at: <https://www.questia.com/magazine/1G1-59138076/how-to-have-a-successful-strategic-planning-meeting>. [Accessed 25 June 2016]
- 043 Flyvbjerg, B., Bruzelius, N., Rothengatter, W. (2003). *Megaprojects and Risk: An Anatomy of Ambition*. Cambridge: Cambridge University Press.
- 044 Forsberg, K., Mooz, H., Cotterman, H. (2005). *Visualising Project Management*. Wiley & Sons, 3<sup>rd</sup> Ed.
- 045 Fox, J., Miller, D. (2006). *Challenges in Managing Large Projects*. Defence University Press.
- 046 Fox, P., Skitmore, M.R. (2002) Key Factors in the Future Development of the Construction Industry. In *Proceedings Creating a sustainable construction industry in developing countries*, Proceedings of the 1st International Conference of The International Council for Building Research Studies and Documentation (CIB) Working Commission W107:

Construction in Developing Co, pages pp. 543-554, Stellenbosch, South Africa.

- 047 Fryer, P. (2016). What are Complex Adaptive Systems? A brief description of Complex Adaptive Systems and Complexity Theory. Trojan Mice. Available at: <http://www.trojanmice.com/articles/complexadaptivesystems.htm>. [Accessed 25 June 2016]
- 048 Gate Review Analytics. (2014). Confidential Record from an organisation delivering Large Infrastructure Projects.
- 049 Glass, R.J., Ames, A.L., Stubblefield, W.A., Conrad, S.H., Maffitt, S.L., et al., 2008, Sandia National Laboratories: A Roadmap for the Complex Adaptive Systems of Systems CASoS) Engineering Initiative, Sandia National Laboratories SAND 2008-4651.
- 050 Golafshani, N., (2003). Understanding Reliability and Validity in Qualitative Research. The Qualitative Report. Vol. 8.
- 051 Goldratt, E.M. (1990) What is this thing called theory of constraints and how should it be implemented? United States: North River Press Publishing Corporation, The
- 052 Gould, S.J, 1996. The Mismeasure of Man. 1<sup>st</sup> Ed. US: Norton
- 053 Green, S. (1999). A participative research strategy for propagating soft methodologies in value management practice. Construction Management and Economics. Vol. 17(3). Pp. 329-340.
- 054 Hair, J.F., Celsi, M., Money, A., Samouel, P., Page, M., 2012. The Essentials of Business Research Methods. United States of America: Wiley & Sons
- 055 Hall, A.D. (1962). A methodology for systems engineering. Princeton, NJ: D. Van Nostrand Co
- 056 Hamilton, A. (2004). Ten Guiding Principles of Change Management. Booz&Co, Available at: <http://www.strategyand.pwc.com/media/uploads/TenGuidingPrinciplesofChangeManagement.pdf>. [Accessed 25 June 2016]
- 057 Hass, K.B., 2009. Managing Complex Projects: A New Model. 1<sup>st</sup> Ed. United States: Management Concepts
- 058 Hillebrandt, P. (2000). Economic Theory and Construction Industry. London: MacMillan Press Ltd, 3<sup>rd</sup> Ed.
- 059 Hoehne, O.M., (2010). Systems Engineering in Major Capital Projects. In 2010 Rail Conference. Vancouver, Canada, 2010-6-6 to 2010-6-9. Washington, U.S.A: American Public Transportation Association. 1-10
- 060 Hsu, C., (2007). The Delphi Technique: Making Sense of Consensus. Practical Assessment, Research and Evaluation, [Online]. Vol. 12, Number 10,, 1-8. Available at: <http://pareonline.net/pdf/v12n10.pdf> [Accessed 25 June 2016]
- 061 Hunt, R.G., Miller, E.J., Rice, A.K. (1968) 'Systems of organization: The control of task and sentient boundaries', Administrative Science Quarterly, 13(2), p. 360. doi: 10.2307/2391466

- 062 INCOSE (2012) INCOSE Infrastructure Group: Guide for the Application of Systems Engineering in Large Infrastructure Projects. # INCOSE-TP-2010-007-01, Version 1, 9-12. United States
- 063 INCOSE DP (2014) INCOSE Deployment Package: Project Management, INCOSE, 2014 United States: John Wiley & Sons.
- 064 INCOSE (2015) INCOSE Systems engineering handbook: A guide for system life cycle processes and activities. United States: John Wiley & Sons.
- 065 INCOSE Transportation Working Group. (2014). Systems Engineering in Transportation Projects, Issue 7.0. INCOSE. Available at: [http://www.incose.org/docs/default-source/TWG-Documents/incose-twg-case-study-library-7\\_0.pdf?sfvrsn=0](http://www.incose.org/docs/default-source/TWG-Documents/incose-twg-case-study-library-7_0.pdf?sfvrsn=0). [Accessed 25 June 2016]
- 066 ISO 31000 Standard. (2009). Risk Management. ISO Standards. Available at: <http://www.iso.org/iso/home/standards/iso31000.htm>. [Accessed 25 June 2016]
- 067 ISO/IEC 42010. (2011). Systems and software engineering – Architecture description, ISO Standards. Available at: [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=50508](http://www.iso.org/iso/catalogue_detail.htm?csnumber=50508). [Accessed 25 June 2016]
- 068 ISO/IEC/IEEE international standard - systems and software engineering – system life cycle processes (2015) Institute of Electrical & Electronics Engineers (IEEE).
- 069 ISO/IEC/IEEE systems and software engineering – architecture description (2011) Institute of Electrical & Electronics Engineers (IEEE).
- 070 Jamieson, S., (2004). Likert scales: how to (ab)use them. MEDICAL EDUCATION, 38, 1212-1218
- 071 Katz, D., Kahn, R.L. (1966). The social psychology of organizations. New York: Wiley. p. 489. [Dept. Psychol., Survey Research Center, Univ. Michigan, Ann Arbor, MI]
- 072 Kay, R. (2009). An APMP Primer. p. 14.
- 073 Kossiokof, A., Sweet, W.N., Seymour, S.J., Biemer, S.M., (2011). Systems Engineering Principles and Practice. 2<sup>nd</sup> Ed. Canada: Wiley & Sons
- 074 Krezner, H. (2013). Project Management Metrics, KPIs, and Dashboards: A Guide to Measuring and Monitoring Project Performance. London: John Wiley & Sons, 2<sup>nd</sup> Ed.
- 075 Krygiel, A.J. (1999) Behind the wizard's curtain: An integration environment for a system of systems. Washington, D.C. National Defence University
- 076 Leedy, P.D.,Ormrod, J.E., (2013). Practical Research: Planning and Design. 10<sup>th</sup> Ed. USA: Pearson.
- 077 Legac, G., Radujkovic, M., and Simac, M. (2014). Cost Overruns in Large Infrastructure Projects – An Overview of International and Croatian Experiences. *PM World Journal*. Vol. 3(2)
- 078 Lincoln, W., Mrozinski, J., Hua, H., Merida, S., Shelton, K., Adumitroaie, V., Weisbin, C. R., Derleth, J. (2006), 1.1.1 START Analysis for ESAS Capability Needs Prioritization. INCOSE International Symposium, 16:5.9
- 079 Makepeace, J., (2008). DOE O 413.3A, Program and Project Management for the Acquisition of Capital Assets. [ONLINE] Available at:

<https://www.directives.doe.gov/directives-documents/400-series/0413.3-Border-a>. [Accessed 29 June 2016].

- 080 Maqsood, T., Finegan, A., Walker, D.H.T, (2009). A conceptual model for exploring knowledge channelisation from sources of innovation in construction organizations: extending the role of knowledge management. 19th ARCOM Conference, pp. 3-5
- 081 Maqsood, T.; Finegan, A.D., Walker, D.H.T, (2003). A Soft Approach to Solving Hard Problems in Construction Project Management. In Second International Conference on Construction in the 21st Century. Hong Kong, 10-11 December 2003. Sustainability and Innovation Management and Technology. pp. 313-314
- 082 Maqsood, T.; Finegan, A.D., Walker, D.H.T., (2001) Five case studies applying soft systems methodology to knowledge management.
- 083 Marks, D., Yardley, L. (2004). Research Methods for Clinical and Health Psychology. London: Sage Publications. 1<sup>st</sup> Ed., p. 56
- 084 Marnewick, A., Pretorius, L., Pretorius, J. (2014). A South African Perspective of the Requirements Discipline: An Industry Review. South African Institute of Electrical Engineering. Vol. 105(3).
- 085 Marnewick, C. , Labuschagne, I. , Ellof. , M., Steyn, H., Tobin, P. (2013). Project Management Maturity versus Project Outcomes in Africa. PMSA Prosperus African Edition. [Online]. Available at: [http://c.ymcdn.com/sites/www.projectmanagement.org.za/resource/resmgr/Publications/Prosperus\\_African\\_Edition.pdf](http://c.ymcdn.com/sites/www.projectmanagement.org.za/resource/resmgr/Publications/Prosperus_African_Edition.pdf). [Accessed 25 June 2016]
- 086 Martin, N. (2004). The Seven Samurai of Systems Engineering: Dealing with the Complexity of 7 Interrelated Systems, INCOSE Symposium
- 087 Meertins, D. (2013) SYSTEMS ENGINEERING SOLUTION. Available at: <http://www.pantura-project.eu/Downloads/D2.10.pdf> [Accessed 28 June 2016]
- 088 Merrow, E. (2011). Industrial Megaprojects: Concepts, Strategies and Practices for Success. 1<sup>st</sup> Ed. Wiley, p. 7.
- 089 Morris, P.W.G. (1997). The Management of Projects. 2<sup>nd</sup> Ed. unknown: Thomas Telford
- 090 Morris, P.W.G. (2004) 'Science, objective knowledge, and the theory of project management, ICE James Forrest Lecture <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.200.1571&rep=rep1&type=pdf>. [accessed 28 June 2016]
- 091 Morris, P.W.G., London (2005) Reconstructing project management. United Kingdom: Wiley-Blackwell (an imprint of John Wiley & Sons Ltd).
- 092 Morris, Peter W. G. The Management of Projects. London: Thomas Telford, (1994). NASA Space Flight Program and Project Management Handbook, 2012. Download at [http://nodis3.gsfc.nasa.gov/OCE\\_docs/OCE\\_8.pdf](http://nodis3.gsfc.nasa.gov/OCE_docs/OCE_8.pdf)
- 093 Morris, Peter W.G. (2005). Managing the Front-End: how project managers shape business strategy and manage project definition, PMI 2005 Global Congress Proceedings – Edinburgh, Scotland. Download at <http://www.indeco.co.uk/filestore/Morris-ManagingtheFront-End2005.pdf>
- 094 Murray, A. (2011). White Paper: PRINCE2 and Governance. Outperform. Available at:

<https://www.apm.org.uk/sites/default/files/protected/Whitepaper%20A%20Murray.pdf>. [Accessed 25 June 2016]

- 095 NASA, (2007). NASA Systems Engineering Handbook. 1<sup>st</sup> Ed. Washington D.C: National Aeronautics and Space Administration.
- 096 NETLIPSE. (2012). Risk Zone-2012. NETLIPSE Report. Available at:<http://netlipse.eu/netlipse-news-archive/2012/09/risk-zone-2012>. [Accessed 25 June 2016]
- 097 Nevine, T. (2015). South Africa's dirty water crisis. *African Business Magazine*, [Online]. Available at: <http://africanbusinessmagazine.com/sectors/infrastructure/south-africas-dirty-water-crisis/>. [Accessed 25 June 2016]
- 098 Nicholas, J.M., Steyn, H. (2012) Project management for engineering, business, and technology. 4<sup>th</sup> Ed. United Kingdom: Taylor and Francis
- 099 O'Brien, B., Jayne, L., Watson, S. (2013). Basic Business Statistics. 4<sup>th</sup> Ed. Unknown: Pearson
- 100 Office of the Deputy Under Secretary of Defence for Acquisition and Technology, Systems and Software Engineering. (2008). Systems Engineering Guide for Systems of Systems, Version 1.0. Washington, DC: ODUSD(A&T) SSE.
- 101 O'Leary, Z., (2004). The Essential Guide to Doing Research. 1<sup>st</sup> Ed. London: SAGE publications, Chapter 3
- 102 Parnell, G. S., McCarthy, D. J., Hardman, N., Yale, G. E. (2012), Using the Guide to the Systems Engineering Body of Knowledge (SEBoK version 0.5) for Undergraduate System Engineering Program Assessment. INCOSE International Symposium, 22: 2208–2220. doi: 10.1002/j.2334-5837.2012.tb01468.x
- 103 Patton, M. (1990). Qualitative evaluation and research methods (pp. 169-186). Beverly Hills, CA: Sage.
- 104 Phillips, J., S., Gully, S.M. (2013) Organizational behavior: Tools for success. 2<sup>nd</sup> Ed. United States: South-Western College Publishing
- 105 PICC. Presidential Infrastructure Co-ordinating Commission.(2012). *A Summary of the South African National Infrastructure Plan*. [pdf] Cape Town: Presidential Infrastructure co-ordinating commission. Available at: <http://www.economic.gov.za/downloads/presidential-infrastructure-coordinating-commission/#piccbook>. [ Accessed 12 Sep 2016]
- 106 Price Waterhouse Coopers. (2013). Highlighting Trends in The South African Construction Industry. SA Construction, 1<sup>st</sup> Ed. Available at: <https://www.pwc.co.za/en/assets/pdf/sa-construction-december-2013.pdf>. [Accessed 25 June 2016]
- 107 Price Waterhouse Coopers. (2014). Capital projects and infrastructure in East Africa, Southern Africa and West Africa. Trends, challenges and Future Outlook. Available at:<https://www.pwc.co.za/en/assets/pdf/capital-projects-and-infrastructure.pdf>. [Accessed 25 June 2016]
- 108 Project Managers Institute. (2013). A Guide to the Project Management Body of Knowledge (PMBok Guide). Project Management Institute, 5<sup>th</sup> Ed.
- 109 Project Managers Institute. (2013). Pulse of the Profession Report. Project Management Institute

- 110 Reschke, H., Schelle, H., (2012), Dimensions of Project Management: Fundamentals, Techniques, Organisation, Applications. New York: Springer-Verlag, p. 85
- 111 Rittel, H.J., and Webber, M.M. (1984). Planning Problems are Wicked Problems. In N.Cross (Edition), Developments in Design Methodology. Chichester, UK: John Wiley & Sons, pp. 135-144
- 112 Roe, C.L. (1996). Project Management And Systems Engineering In An Ipd Environment. INCOSE International Symposium, [Online]. Vol. 6(1), pp. 1063-1068. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/j.2334-5837.1996.tb02123.x/abstract> [Accessed 25 June 2016].
- 113 Roland F. (2007). DOE G 413.3-1 Chg 1 (Admin Chg), Managing Design and Construction Using Systems Engineering for Use with DOE O 413.3A. [ONLINE] Available at: <https://www.directives.doe.gov/directives-documents/400-series/0413.3-EGuide-01-admchg1>. [Accessed 28 June 2016]
- 114 Ryen, E. (2008). Overview of the Systems Engineering Process. Intelligent Transportation Systems, North Dakota Department of Transportation. Available at: <https://www.dot.nd.gov/divisions/maintenance/docs/OverviewOfSEA.pdf>. [Accessed 25 June 2016]
- 115 Sapsford, R., (2007). Survey Research. 2<sup>nd</sup> Ed. London: SAGE publications
- 116 Schwaber, C., (2006). The Changing Faces of Application Life Cycle Management. Forrester Research, pp. 1-15
- 117 Scott, Z. (2012). 9 Laws of Effective Systems Engineering. White Paper. Vitech Corporation. Available at: [http://www.vitechcorp.com/resources/white\\_papers/9\\_Laws\\_of\\_Effective\\_Systems\\_Engineering.pdf](http://www.vitechcorp.com/resources/white_papers/9_Laws_of_Effective_Systems_Engineering.pdf). [Accessed 25 June 2016]
- 118 SE for ITS. (2007). Manual on Systems Engineering for Intelligent Transportation Systems. US Department of Transportation. Available at: <http://ops.fhwa.dot.gov/publications/seitsguide/seguid.pdf>. [Accessed 25 June 2016]
- 119 SE for ITS. Department of Transportation, Office of Operations, (2007). Systems Engineering for Intelligent Transportation Systems. An Introduction for Transportation Professionals, Publication No. FHWA-HOP-07-069
- 120 SE in CES. Guidelines for Systems Engineering Within the Civil Engineering Sector. (2013). Version 3. Available at [http://www.leidraadse.nl/assets/files/downloads/LeidraadSE/V3\\_EN/boek\\_Leidraad\\_SE\\_ENG\\_3\\_72dpi-def.pdf](http://www.leidraadse.nl/assets/files/downloads/LeidraadSE/V3_EN/boek_Leidraad_SE_ENG_3_72dpi-def.pdf). [Accessed 25 June 2016]
- 121 SEBoK Authors. (2015). Stakeholder Needs and Requirements. The Guide to the Systems Engineering Body of Knowledge (SEBoK). New Jersey: Hoboken: The trustees of the Stephens University of Technology. Available at [http://sebokwiki.org/w/downloads/SEBoKv1.3\\_full.pdf](http://sebokwiki.org/w/downloads/SEBoKv1.3_full.pdf). [Accessed 25 June 2016]
- 122 SEBoK. (n.d.), Stakeholder Needs and Requirements, [ONLINE]: <http://sebokwiki.org/wiki>. [Accessed 21 April 2015]
- 123 Senge, P.M. (2006). The fifth discipline: The art and practice of the learning organization. New York, NY: Crown Publishing Group.

- 124 Simon, M.K., (2011). Dissertation and scholarly research: Recipes for success: A practical guide to start and complete your dissertation, thesis, or formal research project. 2<sup>nd</sup> Ed. United States: Dissertation Success
- 125 Simonsen, J., (1994). Soft Systems Methodology: An Introduction. Available at <http://www.softsystemsmethodology.com/ssminroductionjs.pdf>
- 126 SIPs & Skills. Department of Higher Education and Training. (2014). *Skills for and through SIPs*. 1<sup>st</sup> Edition. Pretoria: Department of Higher Education and Training. Available at: [http://www.wrseta.org.za/downloads/1\\_Skills%20for%20and%20through%20SIPs.pdf](http://www.wrseta.org.za/downloads/1_Skills%20for%20and%20through%20SIPs.pdf). [Accessed 16 Nov 1996]
- 127 Standish Group. (1995). The Chaos Report (1994). The Chaos Report [Online]. Available at: [http://www.standishgroup.com/sample\\_research\\_files/chaos\\_report\\_1994.pdf](http://www.standishgroup.com/sample_research_files/chaos_report_1994.pdf). [Accessed 25 June 2016]
- 128 Steyn, H., (2016). Project Management – A Multi-disciplinary Approach. 4<sup>th</sup> Ed. South Africa: FPM Publishing
- 129 Stopher, P., (2012). Collecting, Managing, and Assessing Data Using Sample Surveys. 1<sup>st</sup> Ed. United Kingdom: Cambridge University Press
- 130 Stubbs, M., Knott, A., (2010). Innovative systems engineering practices that help manage the organisational and technical complexity of a modern railway project. In *Railway Engineering - Challenges for Railway Transportation in Information Age*. Hong Kong, March 2008. IET. pp. 1–6
- 131 Sunjka, B., (2015), Investigational Methods, Investigational Projects, Johannesburg, South Africa, pp. 9-14
- 132 Sussman, J., Motshari, A., (2009). A Framework for Analysis Design and Operation of Complex Large Scale Sociotechnological Systems. *International Journal for Decision Support Systems and Technologies*. Vol. 1(2), pp. 52-68
- 133 Sussman, M., (2007). A sharp interface method for incompressible two phase flows. *Journal of computational physics*. Vol. 221(2), pp. 469-505
- 134 Thomsen, C. , Darrington, J. ,Dunne, D., Lichtig, W. (2009). Managing Integrated Project Delivery. Construction Manager Certification Institute. Available at: [https://cmaanet.org/files/shared/ng\\_Integrated\\_Project\\_Delivery\\_\\_11-19-09\\_\\_2\\_.pdf](https://cmaanet.org/files/shared/ng_Integrated_Project_Delivery__11-19-09__2_.pdf). [Accessed 25 June 2016]
- 135 US DoS. United States Department of State: Bureau of International Information Programs, Embassy of the United States of America (2012), Better Infrastructure Brings Economic Growth, United States. p. 1
- 136 Van Gemert, D., (2013). Systems Engineering the Project. [ONLINE] Available at: <http://www.pmi.org/~media/PDF/Publications/Van%20Gemert%20White%20Paper%20for%20RM%20page.ashx>. [Accessed 25 June 2016].
- 137 Wengraf, T., (2001). Qualitative Research Interviewing: Biographic Narratives and Semi-structured Methods. Sage: London, 424 pages
- 138 Whelton, M., Ballard, G. (2002). Wicked Problems in Project Definition. Proceedings of the International Group for Lean Construction 10th Annual

Conference, Brazil. Available  
at:<http://www.leanconstruction.org/media/docs/WickedProblemsinProjectDefinitionIGLC10.pdf>. [Accessed 25 June 2016]

- 139 Wiley et al., (2012). Project Management For Instructional Designers. 1<sup>st</sup> Ed. US: Pressbooks
- 140 Williams, B., van't Hof, S. Wicked Solutions: a Systems approach to Complex Problems. Bob Williams, Version 1.03.
- 141 Wood, H.L., Ashton, P., (2010). Modelling Project Complexity. In Modelling Project Complexity. University of Brighton. U.K: Association of Researchers in Construction Management. pp. 1-3
- 142 Yahiaoui, A., Sahraoui, A.-E.-K. (2015), Using Systems Engineering Practices for Distributed Control and Building Performance Simulation. INCOSE International Symposium, pp. 1290–1304. doi: 10.1002/j.2334-5837.2015.00130.x