



**Please join us on the next INCOSE Webinar**

---

**When**

Wednesday September 11<sup>th</sup> 2019 from 11am-12pm EDT  
(3pm – 4pm UTC)

**Topic**

Human Systems Engineering, Part 2

**Speaker**

John Clark



---

## Abstract

How do we systems engineer humans? How do we engineer systems that include humans? Do all systems include humans? If so, which humans, how are they included in a system, and how do we perform systems engineering on them? Are they elements of the system like hardware and software are? Do we have hardware, software, and humanware? (Yes, you heard it here first folks, humanware!). Are there any systems that do not include humans in any way whatsoever? This presentation discusses these questions from the SE Standards and INCOSE SE Handbook perspectives, going back to their earlier versions and coming up to date, including the two most recent approaches. At the end of this presentation we ask you to answer the question: Which of the two most recent approaches do you consider to be the optimum and for what reasons?

## Biography

John O. Clark was the Corporate Systems Engineering Instructor and a Chief Engineer at Northrop Grumman Corporation with over 50 years of experience applying Systems Engineering and Software Engineering. He is an internationally recognized Subject Matter Expert in Systems Engineering. For INCOSE, John is the Training Working Group (WG) founder and co-chair, Process Improvement WG co-chair, SE Handbook and SE Fundamentals tutorial developer and instructor, Certified SE Professional (CSEP) course developer and instructor, and is a CSEP. He received the coveted INCOSE Outstanding Service Award and was selected to the INCOSE Hall of Leaders at the INCOSE International Symposium in 2010 “For promoting the INCOSE Certification program through leadership in the development and ongoing delivery of the INCOSE SE Handbook Tutorial.” John received the INCOSE Technical Operations Award at the INCOSE International Workshop in 2014 “For the development, delivery, and management of the portfolio of INCOSE webinars, tutorials, and presentations in collaboration with Chapters and other Working Groups.” He was a contributor to the INCOSE SE Handbook V4.0 and presented the Overview of the INCOSE SE Handbook V4.0 tutorial at the INCOSE International Symposium in 2019. John currently recruits and schedules presenters for the INCOSE Technical Operations monthly webinars hosted by Andy Pickard. For Northrop Grumman Corporation, he was the Corporate SE instructor, SE Associates (SEA) instructor, and the founder of the INCOSE Community of Practice (CoP), Agile SE CoP, and the SE Handbook WG. John received the Exemplary Performance Award for Multi-Sector Collaboration from CEO Wes Bush and Engineering Vice President John Chino for developing the Northrop Grumman Corporate SE Handbook. He received a BSEE from Penn State and a MSEE from the State University of New York, and currently is an adjunct instructor for the ENMA 645 Preparation for SE Certification course and the ENMA 690 Capstone Project course in the SE Master’s Degree program at Old Dominion University in Norfolk, Virginia.

---

## How to Connect

---

Please click [here](#) to register for the webinar and/or here to [join](#) the webinar.

**Event number: 599 468 844**

**Event password: INCOSE129**

**Telephone:**

**Primary Access Number:**

USA/Canada: 1-719-457-6209 (toll) 1-605-475-5604 (toll free)

**Additional Access:**

[International Toll- and Toll-Free Access Numbers](#)

**Guest Pass Code:** 733 424 0539

Questions? Go to [Webex Support](#)

You will also find a copy of the joining instructions on the new INCOSE Connect website, at

<https://connect.incose.org/Library/Webinars/Pages/INCOSE-Webinars.aspx>

## Notice

Note that the webinar is a combination of PowerPoint slides + audio. You need to set your browser to the url listed below to see the slides and also dial into the phone number below to hear the audio. We are using Webex for this webinar. Please note that you can now access the webinar using mobile devices. There are 300 virtual seats available for the webinar. Right now they are available on a first-come, first-served basis.

Webex can be used to record meetings. By participating in this meeting, you agree that your communications may be monitored or recorded at any time during the meeting.

## Missed the webinar?

If you miss the webinar, you will be able to see a recording of it on INCOSE Connect at <https://connect.incose.org/Library/Webinars/Pages/INCOSE-Webinars.aspx> where you will also be able to view the previous one hundred and twenty nine INCOSE webinars.

Please note that you can now receive a PDU in support of certification renewal by attending an INCOSE technical webinar. Here is the link to details about certification renewal, including information on PDUs.

<https://www.incose.org/systems-engineering-certification/certification-faqs>

Regards,

---

Andy Pickard  
Rolls-Royce Representative, INCOSE Corporate Advisory Board,  
[Andrew.C.Pickard@rolls-royce.com](mailto:Andrew.C.Pickard@rolls-royce.com)

---

## International Toll Free and Local Phone Numbers

USA :	1-605-475-5604
USA :	1-719-457-6209
Canada, Calgary :	+1 403 407 5793
Canada, Montreal :	+1 514 669 5928
Canada, Toronto :	+1 647 426 9172
Canada, Vancouver :	+1 604 222 7836
Argentina, Buenos Aires :	+54 (0)11 5273 5684
Argentina (toll free) :	0800 345 5424
Australia, Sydney :	+61 (0) 2 8017 6064
Australia, Melbourne :	+61 (0) 3 8687 0553
Australia, Brisbane :	+61 (0) 7 3015 0535
Australia (toll free) :	1 800 804 786
Austria (toll free) :	0800 070 981
Bahrain, Manama :	+973 1619 8739
Bahrain (toll free) :	800 04212
Belarus (toll free) :	8 820 0011 0341
Belgium, Brussels :	+32 (0) 2 400 6928
Belgium (toll free) :	0800 39279
Bosnia and Herzegovina :	+387 7031 1442
Brazil, Sao Paulo :	+55 11 4210 3338
Brazil, Rio de Janeiro :	+55 21 2042 3228
Brazil (toll free) :	0800 887 0140
Bulgaria, Sofia :	+359 (0) 2 491 6045
Bulgaria (toll free) :	00800 111 4950
Canada (toll free) :	1 855 950 3717
Chile, Santiago :	+56 (0)2 321 49944
Chile (toll free) :	800 914 850
China (national) :	+400 613 8103
China, Beijing :	+86 10 5667 0003
China, Shanghai :	+86 21 2039 7081
Colombia (toll free) :	1 800 518 9120
Costa Rica (toll free) :	0800 542 5459
Croatia (toll free) :	0800 805 940
Cyprus (toll free) :	800 97424
Czech Republic, Prague :	+420 225 986 554
Czech Republic (toll free) :	800 701 532
Denmark, Copenhagen :	+45 32 72 78 10
Denmark (toll free) :	80 70 35 86
Egypt (toll free) :	0800 000 0593
Estonia, Tallinn :	+372 622 6551
Estonia (toll free) :	800 011 1589
Fiji (toll free) :	00800 3322
Finland, Helsinki :	+358 (0) 9 2310 1677
Finland (toll free) :	0800 772 236
France, Paris :	+33 (0) 1 70 37 16 56
France (toll free) :	0800 946 531
France (national) :	0811 655 100
France (national) :	0821 231 671
Georgia, Tbilisi :	+995 32 2 050 778

---

Germany, Frankfurt :	+49 (0) 69 2222 10612
Germany (national) :	01801 003 899
Germany (toll free) :	0800 588 9170
Greece, Athens :	+30 211 181 3824
Greece (toll free) :	00800 128 913
Hong Kong :	+852 3018 9111
Hong Kong (toll free) :	800 901 787
Hungary, Budapest :	+36 1408 8953
Hungary (toll free) :	068 001 9673
Iceland (toll free) :	800 9847
India, Delhi :	+91 11 6310 0268
India, Mumbai :	+91 22 6310 0298
India, Chennai :	+91 44 6310 0234
India, Bangalore :	+91 80 6760 8755
India (toll free) :	1800 102 3513
Indonesia, Jakarta :	+62 21 8060 2001
Indonesia (toll free) :	0800 140 1891
Ireland, Dublin :	+353 (0) 1 526 9421
Ireland (national) :	0818 270 271
Ireland (toll free) :	1800 937 649
Ireland (national) :	1890 907 630
Israel, Tel Aviv :	+972 (0)3 721 7943
Israel (toll free) :	1809 388 062
Italy, Milan :	+39 02 3600 8006
Italy, Rome :	+39 06 8750 0676
Italy (toll free) :	800 146 094
Japan, Tokyo :	+81 3 4560 1270
Japan, Osaka :	+81 6 4560 2410
Japan (toll free) :	0120 305 211
Japan (national) :	0570 085 744
Jordan (toll free) :	0800 22172
Kazakhstan (toll free) :	8800 333 7554
Kenya, Nairobi :	+254 (0)207 643 581
South Korea, Seoul :	+82 (0) 2 6007 0079
South Korea (toll free) :	00798 6136 1454
Latvia, Riga :	+371 6601 3627
Latvia (toll free) :	8000 4418
Lithuania, Vilnius :	+370 5205 5468
Lithuania (toll free) :	8800 31449
Luxembourg :	+352 2088 1749
Luxembourg (toll free) :	800 28433
Malaysia, Kuala Lumpur :	+60 (0) 3 7724 8010
Malaysia (toll free) :	1 800 816 152
Mexico, Guadalajara :	+52 33 2101 0008
Mexico, Mexico City :	+52 55 7100 0120
Mexico, Monterrey :	+52 81 2188 0007
Mexico (toll free) :	800 099 1077
Morocco, Casablanca :	+212 (0) 520 48 0022
Morocco (toll free) :	0800 091 296
Netherlands, Amsterdam :	+31 (0) 20 716 8345
Netherlands (toll free) :	0800 020 2597
New Zealand, Christchurch :	+64 (0) 3 974 2596
New Zealand, Wellington :	+64 (0) 4 909 4674
New Zealand, Auckland :	+64 (0) 9 929 1825
New Zealand (toll free) :	0800 452 947
Nigeria, Lagos :	+234 1 277 3944
Norway, Oslo :	+47 21 00 48 15
Norway (toll free) :	800 56081
Oman (toll free) :	800 77265
Pakistan, Islamabad :	+92 5181 08863
Panama, Panama City :	+507 8 323 259
Panama (toll free) :	00800 203 0069

Peru, Lima :	+51 (0)1 705 0248
Peru (toll free) :	0800 76852
Philippines, Manila :	+63 (0)2 271 2701
Philippines (toll free) :	1 800 111 013 99
Poland, Warsaw :	+48 22 295 3570
Poland (toll free) :	00 800 121 4356
Portugal, Lisbon :	+351 21 316 4093
Portugal (toll free) :	800 784 442
Qatar (freephone) :	00 800 100 491
Romania, Bucharest :	+40 (0) 21 529 3992
Romania (toll free) :	0800 801 035
Russia, Moscow :	+7 495 646 9181
Russia (toll free) :	8 800 500 9241
Saudi Arabia (toll free) :	800 844 6641
Saudi Arabia (toll free) :	800 850 0219
Serbia (toll free) :	0800 190 712
Singapore :	+65 6654 9112
Singapore (toll free) :	800 616 3192
Slovakia, Bratislava :	+421 (0)2 3321 5498
Slovakia (toll free) :	0800 002 002
Slovenia, Ljubljana :	+386 1600 8695
Slovenia (toll free) :	0800 81193
South Africa, Johannesburg :	+27 (0)11 589 8321
South Africa (toll free) :	0800 999 434
Spain, Madrid :	+34 91 114 6653
Spain, Barcelona :	+34 93 800 1946
Spain (toll free) :	900 828 035
Sri Lanka, Sri Lanka :	+94 720 910 333
Sweden, Stockholm :	+46 (0) 8 5065 3956
Sweden (toll free) :	0200 125 588
Switzerland, Geneva :	+41 (0) 22 595 4795
Switzerland, Zurich :	+41 (0) 44 580 7207
Switzerland (toll free) :	0800 740 360
Taiwan, Taipei :	+886 (0) 2 2650 7329
Taiwan (toll free) :	0800 666 596
Thailand, Bangkok :	+66 (0) 2104 0761
Thailand (toll free) :	001 800 6136 1473
Tunisia, Tunis :	+216 31 378 101
Turkey, Turkey :	+90 850 390 2006
Turkey (toll free) :	00800 4488 26642
Ukraine (toll free) :	0800 500 896
UAE (toll free) :	8000 3570 2662
UK (03) :	+44 (0)330 336 6002
UK (toll free) :	0800 358 6385
UK (national) :	0844 473 5010
UK (national) :	0845 545 0015
USA /Canada (toll free) :	1-866-398-2885
Uruguay (toll free) :	0004 019 0152
Venezuela (toll free) :	0 800 162 7451
Vietnam, Hanoi :	+84 24 5678 4403
Vietnam, Ho Chi Minh :	+84 28 5678 4429
Vietnam (toll free) :	1800 400 371

STAY CONNECTED:





This email was sent to [info@incose.org](mailto:info@incose.org) by [info@incose.org](mailto:info@incose.org) |  
Rapid removal with [SafeUnsubscribe™](#) | [About our service provider.](#)



INCOSE | 7670 Opportunity Rd Ste 220 | San Diego | CA | 92111