UK INCOSE Strategy

INCOSE STRATEGY
RICHARD BEASLEY
APRIL 2014
Table of Contents
INCOSE UK Strategy 2014 .................................................................................................................. 2
Introduction ........................................................................................................................................ 3
Strategic Context .................................................................................................................................. 3
Mapping of INCOSE strategies to the UK INCOSE Goals to the roles on the UK INCOSE council .... 3
Update direction ..................................................................................................................................... 5
Specific changes .................................................................................................................................... 6
Next steps in strategy improvement .................................................................................................... 7
Summary of strategy highlights ............................................................................................................ 7
Appendix 1 : Mike Wilkinson’s Strategy Mind Map ............................................................................. 8
Appendix 2: INCOSE Core Values (created by the INCOSE BoD at IW13) .......................................... 9
Introduction
INCOSE UK Strategy 2013 was an update from previous work published in September 2008. The 2014 update is part of an annual update. The 2014 update focuses on emphasising / making clearer the goals and metrics based on feedback and consideration of the major revamp it received in 2013.

The 2013 issue represented refreshment and evolution of the strategy for 2008-2012 published in September 2008, based on systems dynamics modelling conducted for us by Kim Warren. Mike Wilkinson’s strategy Mind Map (appendix) has been a key representation of the strategy, used to evolve the scope and roles of the Council, most recently with the creation of the ERC. Thus the 2013 strategy represented a significant update - as a refresh / evolution, but not starting from scratch. Based on the briefings and feedback on the strategy throughout 2013 this 2014 update is a less significant change, merely consolidating the update and creating greater focus on certain strategic areas.

Strategic Context
In 2013 INCOSE produced a statement of its core values which was resonant with INCOSE UK’s values.

The UK and global economy continue to make the environment difficult for businesses globally, with general problems and particularly a decline in military spend. Perversely this makes the need for application of Systems Engineering stronger (to increase effectiveness of Engineering effort to develop / improve business offerings), but makes it more difficult to invest in learning new methodology and skills.

Mapping of INCOSE strategies to the UK INCOSE Goals to the roles on the UK INCOSE council
To improve the connectivity of INCOSE UK strategies to the goals to the different roles on the UK INCOSE council the following pair of relationship matrices (a form of light QFD) have been created.

The second figure shows the current view. Obviously as individual plans are developed, this should be updated to reflect the connections between activities / initiatives and the goals of the UK chapter.
<table>
<thead>
<tr>
<th>Strategies / goals</th>
<th>GOAL 1 INCOSE UK is a recognized and respected authority for Systems Engineering in the UK.</th>
<th>GOAL 2 Government, Academic and Industrial organizations in the UK increasingly apply and recognize systems engineering.</th>
<th>GOAL 3 To improve the professional status of all persons engaged in the practice of systems engineering.</th>
<th>GOAL 4 To promote improvements in practice of systems engineering, and share / communicate best practice.</th>
<th>GOAL 5 To maintain our status as a sustainable and professionally managed Learned Society.</th>
<th>GOAL 6 To operate as a respected, influential, and collaborative chapter within INCOSE globally, and the EMEA sector.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Build and sustain a diverse membership (individuals and organizations) spanning all applicable domains.</td>
<td><strong>H</strong></td>
<td><strong>H</strong></td>
<td><strong>L</strong></td>
<td><strong>L</strong></td>
<td><strong>L</strong></td>
<td></td>
</tr>
<tr>
<td>2. Inspire and support members to develop as effective, influential, systems engineers.</td>
<td><strong>L</strong></td>
<td><strong>L</strong></td>
<td><strong>H</strong></td>
<td><strong>H</strong></td>
<td><strong>L</strong></td>
<td><strong>L</strong></td>
</tr>
<tr>
<td>3. Ensure that INCOSE UK is a well governed and financially stable organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>H</strong></td>
<td><strong>L</strong></td>
</tr>
<tr>
<td>4. Intelligently engage with INCOSE EMEA Sector and globally to achieve our vision.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>L</strong></td>
<td><strong>H</strong></td>
</tr>
<tr>
<td>5. Contribute to establishment of Systems Engineering approach as part of “UK plc” policy, through appropriate engagement and strategic relationships.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>H</strong></td>
<td><strong>L</strong></td>
</tr>
</tbody>
</table>
### INCOSE UK 2014 Strategy

#### Goals

<table>
<thead>
<tr>
<th>INCOSE UK Strategy</th>
<th>Operations Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INCOSE UK is a recognized and respected authority for Systems Engineering in the UK.</td>
<td>L L H L H</td>
</tr>
<tr>
<td>2. Government, Academic and Industrial organizations in the UK increasingly apply and recognize systems engineering.</td>
<td>H L L L H</td>
</tr>
<tr>
<td>3. UK increasingly apply and recognize systems engineering.</td>
<td>L L H L L</td>
</tr>
<tr>
<td>4. To promote improvements in practice of systems engineering, and share / communicate best practice</td>
<td>H L L L L</td>
</tr>
<tr>
<td>5. To maintain our status as a sustainable and professionally managed Learned Society</td>
<td>H L H L</td>
</tr>
<tr>
<td>6. To operate as a respected, influential, and collaborative chapter within INCOSE globally, and the EMEA sector</td>
<td>L L L L H</td>
</tr>
</tbody>
</table>

#### Key Numbers

- **L** some input
- **H** Strong input

<table>
<thead>
<tr>
<th>External Relations Committee</th>
<th>Operations Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Numbers</td>
<td>L L H L H</td>
</tr>
</tbody>
</table>

#### Update direction

The changes made in 2014 are intended to emphasise two items in INCOSE UK’s work:

1) To provide real value-add to its membership. This includes making the INCOSE certification more meaningful to the UK (competency) context, providing improved accessibility for UK members to guidance on the current practice of Systems Engineering, and providing direction / influence over improvements in the state of the art (to cover gaps of importance to practicing Systems Engineers)

2) To provide influence across “UK plc” to create a stronger appetite for and engagement with the Systems approach. This is broader than, but does not replace, ambitions to increase engagement (professional bodies and growth in diversity of UKAB membership) with SE. It is to general (business and government leadership) understanding of the important capability and potential assistance to UK economy Systems Engineering offers.

Whilst it is a 2014 focused strategy, it has longer scope than that. The intent is to try and make the metrics apply for the rest of the decade (to show positive trends for INCOSE UK). The strategy must influence the financial strategy for at least 2013/14 and 2014/15 financial years. There must be increased focus on what the chapter can afford to do, so that the INCOSE UK funds are correctly deployed and maintain margin for future, expensive “outreach opportunities”.

---
2014 is the 20th anniversary of the INCOSE UK chapter, and there are plans to celebrate this. This must be used to try and enhance external engagement with areas outside existing INCOSE membership (individual and company). There is also the possibility of IS 2016 being held in UK, the decision will be taken by the INCOSE Board of Directors in June 2014. This will have significant (negative) budget implications for the chapter, but represents an enormous opportunity for outreach / engagement / influence outside “traditional” INCOSE. Even if the IS 2016 is not in the UK, we must look to have budget for significant external engagement. This means we must develop financial strategy to focus on “sustainable” budget, not only for our current activities, but to fund our attempts for increased engagement.

It is hoped that the external engagement will be a long term virtuous circle – increase national awareness of the importance of Systems engineering will lead to greater engagement with INCOSE UK – leading to larger membership. For this to be sustainable the existing organisation and member offering must ensure it is robust to (hoped for) growth in organisation size.

In general the goals established in 2013 can be re-structured into a matched set of pairs – input and output to three groups – UK government, academia and industry, the UK INCOSE membership, as shown in diagram below:

Specific changes

Strategies - #5 has been adjusted to include engagement with “national influence” bodies as well as “just” professional bodies

Goal 1 – broadly unchanged – update and generalisation of the metrics, and update
Goal 2 – greater focus on external engagement to create a pull for Systems engineering membership (rather than pulling into INCOSE fold)

Goal 3 – added the development of the competency based certification option we are developing

Goal 4 - greater focus on provision of “state of SE art” and “guide to practice” for members (access to wider information, not redefinition), and the need to determine level of SE inclusion in education, and a policy for Student engagement

Goal 5 – simple implementation of the ideas developed on communication and strategy at the last Joint UKAB / council meeting (Nov 2013)

Goal 6- largely unchanged – just clearer link to our finances and the initiatives – so the spend of money is planned (not reactive) and we know what is affordable (and what current surplus is for).

The metrics have been slightly reformatted and defined – to both reflect progress towards the goals (rather than completion of specific initiatives), and to attempt to be long term measures that can be used year to year to give a clear indication of trends.

Next steps in strategy improvement

The INCOSE UK strategy needs to be a living document, building on the ideas and direction provided by INCOSE centrally, the UK INCOSE council members, the advice from the UKAB and the wishes of the individual members. In this reissue there has been a focus on making greater connection between the council roles and the goals – which is expanded upon in the updated Operations Plan.

In future updates there needs to be an improved connection / integration between the individual Council area plans and the initiatives section. The metrics need further work to make them clear and simple measures of progress that indicate progress towards the goals, with the same data being collected and compared year to year.

Summary of strategy highlights

- More outward facing engagement to influence the pull /for / acceptance of / understanding of Systems Engineering – and recognition of INCOSE UK as the place to go for SE advice
- Emphasise the need to lead / drive an agenda for improvement in the current state of SE practice (so develop the state of the art)
- Better technical communication of the “state of SE art” to UK members – integrating access to SE knowledge (from all sources)
- More coherent SE communication and engagement policy – publications have clear purpose / target audience
- Policy for engagement with students
- Competency based certification of SE
- Clearer financial plans – so what is affordability of the initiatives, and what the “Surplus” is for.
Appendix 1: Mike Wilkinson’s Strategy Mind Map
Appendix 2: INCOSE Core Values (created by the INCOSE BoD at IW13)

In INCOSE we value:

- **Systems Thinking** – thinking and acting to apply systems approaches to address complex challenges and thus to realise successful sustainable solutions.

- **Pioneering and Innovation** – taking opportunities ourselves or with partners to evolve systems approaches to meet future challenges.

- **Learning and Development** – life-long learning with a changing world through education and continuing professional development, covering both technical and leadership competencies.

- **Respect, Diversity, Collaboration** – building and maintaining respectful relationships internally and externally in order to enable effective collaboration across the diverse community.

- **Individuals** – the importance of people, their intellect and influencing skill, to support complex decisions and to deliver enduring change.

- **Volunteerism** – volunteers and staff working together to achieve our objectives and to deliver benefit to our members, individuals and society.