

Knowledge Systems for Sustainability – Meeting Report

17-20 June 2015

International Institute for Applied Systems Analysis

All meeting sessions were held at IIASA, Schlossplatz 1, A-2361, Laxenburg, Austria
Meeting hotel was: Hotel Refugium, Kirchengasse 4, A-2353 Guntramsdorf ; phone +43 2236 506650;
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Meeting organized by Molly Jahn, Marc Levy, David LeZaks and Michael Obersteiner
with logistical support from Beth Floyd and Cynthia Festin
Meeting report prepared by David LeZaks and Molly Jahn

Overview

In early 2012 a set of prospective partners came together as a community of practice to explore mutual interests in building and testing improved knowledge systems for sustainability (KSS), a key enabling capability for many global, national, financial and other processes, and a convergent science frontier. The community elected to focus on strategies to provide more adequate objective reflections of Earth-human systems relevant to humanity's demands for water, energy, food and materials. In 2015, a core set of organizational partners, known informally as KSS, is formalizing its commitment to this goal.

KSS partners possess complementary competencies and assets with regard to scientific domain expertise, data capabilities, research methodologies, and abilities to link with decision-makers and support at-scale learning. Collectively they have the potential to deploy at a scale that more closely matches rapidly growing demand for analytics than the current approaches in sustainability science, or single dimension, domain-focused efforts, e.g., energy, water, food, etc., currently offer.

This report summarizes a meeting convened at IIASA in June 2015 to formalize and advance the design, operation and management of KSS, including a plan for a new collective name for the partnerships involved, and to advance the development of collaborative projects in this next phase of our collective work. We introduced the Battelle Memorial Institute, represented by Jill Engel-Cox, to KSS. Battelle brings a wealth of knowledge about large-scale science management and many relevant complementary capabilities.

In pilot mode, the KSS community of practice has already proved its value to partners individually and collectively through new bilateral projects, enhanced existing activities, development of new concepts and ideas each organization individually could not develop and increased visibility where desired. Novel initiatives have been launched that have brought together diverse disciplines, crafted new methodologies, and engaged a wide range of global actors in new ways and advanced scientific understanding. These initiatives were reviewed at this meeting as foundations of our future work and exemplars of our shared strategies, including a common emphasis on systematic exploration of risk at the land/water/energy/climate nexus and a commitment to begin construction of a distributed, shared knowledge system of sustainability.

We will build on these successes by exploring new, large-scale, investor-ready opportunities to partner in a research / operations mode focused on risk and resilience at the land/water/energy/climate nexus. We will accomplish this by working in a rigorous scientific mode at scale toward high quality outputs in decision-relevant formats.

This meeting report summarizes the outputs and next steps from the meeting, provides links to key documents and lists summarized action items for each organization at the end of the document.

We thank our host, Michael Obersteiner and his team at IIASA, especially Cynthia Festin for their hospitality and support. David LeZaks and Beth Floyd have provided core support for all aspects of the meeting.



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Meeting attendees

Jill Engel-Cox, Battelle Memorial Institute
 Steffen Fritz, IIASA
 Mike Grundy, CSIRO
 Jay Gulledge, ORNL
 Molly Jahn, U Wisconsin, joint faculty at ORNL, adjunct researcher at Earth Institute
 Martin Keller, ORNL
 Sylvia Lee, Skoll Global Threats Foundation
 Marc Levy, Earth Institute, Columbia University
 David LeZaks, U Wisconsin
 Andy McDonald, CIMMYT
 Michael Obersteiner, IIASA
 Steve Kasputis, MACE
 Linda See, IIASA
 Marc Gordon, UNISDR
 Andrew Maskrey, UNISDR
 Scott Williams, PwC

Synthesis of assignments

ASSIGNMENT 1:

Identify (1) your organization’s key priorities and strengths in the context of the KSSCo ‘ecosystem,’ (2) the key ‘ingredients’ most needed for your organization from a formal and more centrally managed KSSCo joint venture with Battelle, from a brazenly self-interest perspective, and (3) an illustration or two from existing near-term prospects from your organization of how KSSCo partners can help solve problems or catch important opportunities. Be selective and focus on key issues only.

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|------------------------|---|
| <p><i>Battelle</i></p> | <p><i>Brings capacity to manage large partnerships with many partners Has capacity to perform applied research & understand issues at the food – water-energy nexus Needs to match KSS goals and mission with Battelle’s “betterment of humanity” mission Projects that Battelle manages need to be financially self-sufficient Want to contribute to what is needed to effectively build a virtual laboratory</i></p> |
| <p><i>CIMMYT</i></p> | <p><i>The world’s leading and only international center that works for sustainable maize and wheat systems for the poor Long-term cross agro-ecology data sets on Wheat and Maize genetics and physiological behavior Has the custody of the world’s Maize and Wheat biodiversity Interdisciplinary systems programs operate on the ground in the main maize and wheat growing areas in S-Asia, Africa and Latin America Catalyst of public and private partner networks in the developing world Proven track-record of science for impact Home of the only agricultural Nobel Prize Winner Norman Borlaug Multi-disciplinary teams of scientists that include agronomists, soil scientists,</i></p> |

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| | <i>anthropologists, breeders, crop physiologists, pathologists, lawyers, etc.</i> |
| <i>Columbia's Earth Institute</i> | <p><i>Deep ties to world-class basic research, including private business, UN and others</i></p> <p><i>Translating research to real-world needs</i></p> <p><i>Looking for sustained, effective ability to team, built on long-term relationships</i></p> <p><i>Work with complementary organizations to tackle big problems</i></p> <p><i>Organizational superstructure that makes it easy to deploy our intellectual strengths into practice</i></p> <p><i>Several near-term opportunities related to Sustainable Development Goals, climate threats to human security, capacity building for spatial data development and pathways for a future sustainable world</i></p> |
| <i>CSIRO</i> | <p><i>Development new perspectives on 'theory of change' to meet our shared goals and our potential contribution</i></p> <p><i>Have a track record in "big issue" science</i></p> <p><i>Want to develop and use new techniques that can be used to better guide our future</i></p> <p><i>Fill gaps in key component "smart" data layers across multiple scales that allow us to answer complex, integrated questions</i></p> <p><i>Already works in partnership with many research organizations across the globe – need to define the KSS 'uniqueness' within CSIRO</i></p> |
| <i>IASA</i> | <p><i>Priorities include a variety of "nexus" issues, many of which use a risk framework. There is a strong focus on using earth observations</i></p> <p><i>Use a variety of bottom-up and top-down methodologies in their research.</i></p> <p><i>A small research organization, but had success in working across the nexus issues, given that they are nimble</i></p> <p><i>Could benefit from additional collaboration and exchange of idea and people</i></p> <p><i>Geo-wiki and Global agriculture outlook consortium are two projects that could be leveraged into KSS</i></p> |
| <i>ORNL</i> | <p><i>Key strengths in computation and computing resources, including Earth system modeling and dynamic downscaling of climate model output</i></p> <p><i>Ability to handle large-scale real-time data processing</i></p> <p><i>New extreme events data center and population modeling could be leveraged across multiple projects</i></p> <p><i>Capacity in adaptation, settlements and infrastructure</i></p> <p><i>Already working with several KSS partners on projects</i></p> |

ASSIGNMENT 2:

Identify the most important organizational requirements for a formal KSSCo and the joint venture with Battelle to be viable for you: (1) What are must-have organizational traits? (2) What are kiss-of-death organizational traits? Include anything that matters, no matter how petty or grandiose it might appear.

NOTE: A summary of the highest priority organizational issues that need to be agreed upon is presented below.

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| <i>Battelle</i> | <i>Want open communications and collaboration Involvement in the longer-term management of KSS Need progress in the development of a project pipeline</i> |
| <i>CIMMYT</i> | <i>Transparency among the partners Respect for individual institutional processes and how they influence KSS as a whole Nimble, low transaction costs Clear decision making procedures amongst partners Clear vision on the need for project funding and joint investment generation Clear IP that protects CIMMYTs mission for the generation of International Public goods</i> |
| <i>Columbia's Earth Institute</i> | <i>Nimble, low transaction costs Clear decision making procedures amongst partners Maintenance of individual identities IP approach that maintains academic freedom</i> |
| <i>CSIRO</i> | <i>Need clear IP considerations for both pre-existing and new IP Legal jurisdiction needs to be decided (Australia / US / other)</i> |
| <i>IIASA</i> | <i>Need flexibility and openness to be able to bring the best science forward Develop a multi-tiered operating model where we can bring in other partners, if need be They are obliged to a non-Non Disclosure Agreement (NDA) culture, and need to determine how that might work with prospective private sector partners</i> |
| <i>ORNL</i> | <i>Complete transparency across all partners Disciplined culture to identify and go after proposal opportunities and to track lessons learned of successes and failures Ability to assess, track, and communicate impact of KSS from the beginning so as to illustrate value to current and future stakeholders and sponsors Processes established to ensure smooth flow of research results and funds across members Ease of movement of funds / research results between partners Develop strategic and business plans (these are two different entities) that provide a disciplined roadmap for KSS</i> |

ASSIGNMENT 3 & 4:

Identify some things you think KSSCo and the joint venture with Battelle could plausibly do that would fundamentally reset expectations in the world about what is possible and that would justify the efforts to bring the KSSCo JV into existence at scale.

List some current or contemplated projects that could be expanded to integrate other members of the quint, in furtherance of both KSSCo's and the joint venture with Battelle's objectives. Who are the potential sponsors?

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| <i>Battelle</i> | <i>Demonstrate new ways of doing global research Harness power of collaborative R&D to solving world problems</i> |
| <i>CIMMYT</i> | <i>Process level understanding where it does not exist today Development of agricultural decision tools that go across scales System response predictions of parent and current unstable and unpredictable stresses Develop high level concepts that integrate food security, risk and capital so we can show science for impact ROI to the capital as well as the private food sector Existing Systems Projects Sub-Saharan Africa</i> <ul style="list-style-type: none"> <i>• Taking Maize Agronomy to Scale in Africa (TAMASA) – Ethiopia, Tanzania and Nigeria</i> <i>South Asia</i> <ul style="list-style-type: none"> <i>• Cereal Systems Initiative for South Asia (CSISA) Phase II and III - Nepal, India, Bangladesh</i> <i>• Cereal Systems Initiative for South Asia – Mechanization and Irrigation (CSISA-MI) – Bangladesh</i> <i>• Spurring a Transformation in Agriculture through Remote Sensing (STARS) –Bangladesh</i> <i>• The Sustainable Modernization of Traditional Agriculture (MasAgro) – Mexico</i> |
| <i>Columbia's Earth Institute</i> | <i>Guide the design of a global informatics and analytics infrastructure to support the SDGs Build modeling capability that integrates climate, water, food, energy in a security context Build capability to identify droughts historically and in real time Guide the production of a human security report Guide the creation of a tool or toolkit to characterize multi-dimensional risk that drives awareness and action Build capability to identify droughts historically and in real-time</i> |
| <i>CSIRO</i> | <i>Have improved understanding of trade-offs and synergies across water, energy, and food security Greater capacity to manage risks and promote resilient, inclusive and sustainable prosperity Use tools like scenarios / trajectories / interventions / investments to explore risk and resilience Complete the key component gaps as needed but not as an end in themselves</i> |

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| | <i>Multi-scale modeling of the F/W/E/L nexus Effective and attractive [science and evidence-based] governance and management strategies for responsible resource development, enhanced water, energy, and food security, and sustainable prosperity</i> |
| <i>IIASA</i> | <i>Massive unusual interoperable data streams Global analytical coverage that is good enough Operational risk approach informing real decision (instantaneous risk tax) Joint projects could include a geo-wiki for the SDGs, tools to look at nutrient imbalances (especially P) across scales, and new types of global outlooks</i> |
| <i>ORNL</i> | <i>Need to look ahead to exascale computing. What would we do if not limited by compute power Sample projects in which to build could include: Multiple Bread Basket Failure Initiative Visualizing the World Food Systems Initiative Expanding projects with CIMMYT International extreme events data center Monsoon Intervention project Full synchronous coupling between IAM-crop models/ESMs</i> |

Core areas of KSS expertise, near-term and longer-term core areas of concentration

*We resolved that the core areas of expertise across the partner organizations could be divided into governance, informatics and analytics. Within each of those core areas, we brainstormed specific research areas that might be of interest to potential funders. A brief 2-page overview of the challenge and our solutions-oriented approach to it will be produced and used as part of our marketing materials. Those topics are denoted with **.*

| <i>Governance</i> | <i>Informatics</i> | <i>Analytics</i> |
|--|--|--|
| <i>Operational risk management [Grundy]</i> | <i>Use of exascale computing [Gulledge]</i> | <i>Model extreme events overlaid with demography/urbanization/infrastructure [Gulledge, Levy]</i> |
| <i>Articulate more effective theory of change [perhaps this emerges over time as we get more experience]</i> | <i>Massive unusual interoperable data streams [Grundy]</i> | <i>Make analytic tools more relevant across time/space/issues and generate multi level decision tools based on those tools</i> |
| <i>Report threats to human security [Levy]</i> | <i>**Design global data infrastructure for SDGs [Levy & Obersteiner]</i> | <i>**2-way synchronous coupling economic/Earth system models [Gulledge, Obersteiner]</i> |
| <i>Predict systems responses to current unpredictable and unstable stresses</i> | <i>Adaptive sensor networks [ORNL]</i> | <i>Analytics to better understand resilience and impacts of present choices</i> |
| <i>Small holder farmers and their role in risk management of food companies</i> | <i>Knowledge Management for Agricultural innovation</i> | <i>**Tools to cope with unknowable futures across nexus issues [Grundy]</i> |

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|-----------------------------------|--|--|
| <i>Risk-Food Security-Capital</i> | | <i>Resource monitoring in model/data fusion mode [Grundy, Engel-Cox, Govaerts]</i> |
| | | <i>Multi-model population approaches (e.g. ORNL, IIASA, CIESIN, WordPop...)</i> |
| | | <i>**Monsoon Failure [Gulledge]</i> |

*** = partners agree to produce immediately. Circulate first drafts internally by July 24.*

KSS Marketing

There is existing awareness about each of the KSS partners, but as we work to build knowledge systems and intelligently facilitate learning, we need to actively market the vision, capabilities and describe why this venture is different and why it is critical. The following is a list of steps, with leads and dates where appropriate, detailing how to actively market KSS.

| Item | Lead | Timeline |
|--|-------------|-----------------|
| Draft a paper for a high-profile / fast publication journal highlighting the challenge and novel approach provided by KSS | Levy | 31 July |
| Production of a general slide deck for use within organizations and at meetings (5-8 slides) | Engel-Cox | 10 July |
| Concept papers that illustrate how KSS can apply its approach to areas of interest to potential funders. Monsoon Intervention – ORNL with support from CIMMYT Sustainable Development Goals – Earth Institute (with support from IIASA) 2-way synchronous coupled models – IIASA (with support from ORNL) Tools to cope with unknowable futures across nexus issues – CSIRO KSS interactions with RISE – Jahn and LeZaks Others in the future might include, multiple breadbasket failure & visualizing the world's critical systems | Each org. | 24 July |
| Refine KSS prospectus | LeZaks | 17 July |
| Prepare list of prospective funding clients and potential customers | Levy | 24 July |
| Develop draft branding materials | Engel-Cox | 31 August |
| Draft articles for industry media / websites (ghost write for others to publish) | TBD | TBD |

Review of the work plan and resolution of organizational issues

During the past month, Jill E-C, Marc L. , Molly J. and David L. drafted a work plan for the start-up stage of KSS. The document drew from previously written content and specific roles, general targets, goals, timelines, budgets and draft organizational structures. Jill E-C presented the plan and received feedback on how to proceed with the revisions to the workplan. The draft workplan presented at the meeting is linked below.

| Item | Lead | Timeline |
|--|---|-----------------|
| <p><i>Jill E-C with support from David L. will revise the KSS Work Plan</i></p> <p><i>There was consensus that we should call ourselves “Knowledge Systems for Sustainability” which is the joint efforts of 6 core partners (Battelle, CIMMYT, CU’s Earth Institute, CSIRO, IIASA, and ORNL). We recognize the contributions of the KSS community of practice and will consider and clearly communicate what their roles will be in the future.</i></p> | <i>Jill E-C</i> | <i>24 July</i> |
| <p><i>Gather nominations for the advisory council</i></p> <p><i>This group of distinguished advisors will help to shape public opinion, introduce potential funding opportunities and be a supportive voice for our work.</i></p> | <i>LeZaks to manage with input from all</i> | <i>ongoing</i> |

KSS Partners’ Terms of Engagement

In the last several months of phone calls, these issues were repeatedly brought up as core issues that needed to be resolved before moving forward. We agreed that the partners listed below will draft a short statement characterizing the issue, describing how the KSS principles apply, and propose a solution. During the meeting we began developing agreement on terms of engagement between the key partners of KSS (R&D partners and managing partner) as part of the process to finalizing streamlined legal agreements for collaborative research through KSS. The following incorporates the work done at the meeting with additional details and clarification added by Jill Engel-Cox.

Process/Next Steps (responsible person(s) in parentheses):

1. Review and comment on following proposed terms (KSS R&D partner leads)
2. Review and revision of terms into more legal language by Battelle Legal (Battelle)
3. Review and comment on draft legal terms (KSS partner leads and legal reps)
4. Prepare draft umbrella agreement and draft individual agreements (Battelle)
5. Review and comment on draft agreements (KSS partner leads and legal reps)
6. Ongoing negotiations by all parties

| Terms of engagement | Lead |
|--|-------------------------|
| Legal jurisdiction for Conflict Resolution <ul style="list-style-type: none"> • U.S.A. (exact state to be determined) | Engel- Cox |
| Intellectual property <ul style="list-style-type: none"> • Background IP will be held by the original owner • Background IP that is incorporated into new KSS projects could be licensed for free or with a fee • New IP from KSS projects will be jointly held by all partners no matter who actually develops it • Licensing of new KSS IP to be decided on case by case basis by project in advance, with default to open access • Decision on licensing of KSS IP will by consensus by parties • Funding client can share IP, to be decided on case by case basis by project in advance • Any major conflicts to be resolved by KSS Board | Grundy / Harsdorf/ Levy |
| Non-disclosure <ul style="list-style-type: none"> • Partners and KSS always allowed to say they have done work with someone (no secret projects) • In general, all results should be available openly • Private input can remain private (although generalized results can be made publically available) • Projects should not restrict future freedom to operate, no limits to future contracting | Obersteiner |
| Attribution <ul style="list-style-type: none"> • Authors and other project participants in project deliverables should be attributed to the level of their contribution, with the option for them to opt-out | Engel-Cox |
| Conflict of Interest <ul style="list-style-type: none"> • Potential conflicts of interest by any partner should be declared and then mitigation discussed • Any party retains the ability to withdraw from participation in a project and from KSS overall | Engel-Cox |
| Team Formation for project <ul style="list-style-type: none"> • Teams should include at least two and ideally most core partners • Preference for team selection goes first to KSS partners • If outside partners or experts need to be brought in, then that is allowed if no KSS partners cannot fulfill the requirements • Team formation is responsibility of the project manager; any major conflicts resolved by the Board | Engel-Cox |
| Indemnification <ul style="list-style-type: none"> • Partners will not indemnify their work to the client | Engel-Cox |

Overview of RISE / Global Risk Model / UNISDR Global Assessment Report

Representatives from the United Nations Office for Disaster Risk Reduction and PricewaterhouseCoopers on behalf of the RISE Initiative joined us on the second day of the meeting to review their projects and determine a path forward in working with KSS.

There are two possible work streams that could be developed from these interactions.

1) **The RISE Initiative** – this project is run jointly between PwC and UNISDR and is working across 8 activity streams with a range of public and private organizations as part of the project. We were introduced to the RISE leadership with the intent of exploring how science could better inform the risks that they are working to reduce. They currently have an explicit focus on urban areas, but realize the importance of the urban-rural interface and the effects of larger scale dynamics (e.g. climate, natural hazards) have on vulnerable populations. The next steps in our dialogue to is develop specific proposals of how science can be integrated across the work being proposed within the activity streams and to build learning systems across the whole of RISE’s operations. Initial funding is being sought from the Green Climate Fund, but the funding being released now is specific to target countries and may not be a good fit for the work we are proposing.

RISE has also engaged The Ecological Sequestration Trust and their Resilience.io model platform in early stage projects that were presented to the GCF. As KSS continues its dialogue with RISE, we need to better understand the Resilience.io platform and how our capabilities relate to their planned work. Links to overview materials can be found below.

Next steps include drafting proposed science inputs to the RISE process and investigating potential opportunities with sponsors both within and outside the GCF process. This will be led by Jahn / LeZaks.

2) **UNISDR’s Global Risk Model** – *This model is a key component to the UNISDR’s Global Assessment Report, which is issued every 2-4 years. The model has been developed over number of years with a variety of partners, including some of the core KSS partners. There are several necessary additions needed to more fully consider disaster risk. These include agriculture, drought, flood, frost (for crops), volcanic ash (globally and for crops), and others.*

We have agreed to organize a meeting with UNISDR staff and bring in experts from relevant areas to provide feedback on the GRM process and next steps. This meeting will likely be in the US, in Q4. All other details are pending. Jahn / LeZaks are taking the lead on this.

Upcoming calendar of events

| Event | Date | Location | Expected attendees |
|---|----------------------------|--|--|
| <i>CIMMYT technical staff to ORNL</i> | <i>22-24 June, 2015</i> | <i>Oak Ridge, TN</i> | <i>Govaerts, Gulledge, Keller and others</i> |
| <i>KSS Organizational meeting</i> | <i>23-24 July, 2015</i> | <i>Madison, WI</i> | <i>Jahn, LeZaks, Engel-Cox, Levy (not confirmed)</i> |
| <i>ORNL to CSIRO</i> | <i>October 26-28, 2015</i> | <i>Australia</i> | <i>Jahn, Keller, Gulledge, Grundy and others</i> |
| <i>CIMMYT leadership to ORNL</i> | <i>December 2-3, 2015</i> | <i>Oak Ridge, TN</i> | <i>Govaerts, Gulledge, Keller, Jahn and others</i> |
| <i>Global Risk Model – water, drought and agriculture integration</i> | <i>December 8-10, 2015</i> | <i>The National Water Center, Tuscaloosa, AL USA</i> | <i>All interested partners</i> |
| <i>KSS Partners meeting</i> | <i>January 19-21, 2016</i> | <i>San Francisco, CA courtesy of Skoll Global Threats Fund</i> | <i>All</i> |
| <i>IIASA to ORNL</i> | <i>Spring 2016</i> | | <i>Obersteiner, Keller, Gulledge</i> |

Summary of documents

[KSS Workplan](#)

[KSS draft deck](#)

[KSS Partner assignments](#)

[Battelle overview documents](#)

[RISE slides](#)

[GAR slides](#)

[The Ecological Sequestration Trust's Resilience.io platform](#)

Documents mentioned during the meeting

[Multiple Breadbasket Failure Initiative Science Agenda outline](#)

[Lloyd's report on Food System Shock: The insurance impacts of acute disruption to global food supply \(co-authored by Molly and her research team\)](#)

Overview of tasks by organization

| Organization / person | Task | Due date |
|------------------------------|---|-----------------|
| <i>Battelle</i> | Production of a general slide deck for use within organizations and at meetings (5-8 slides) | <i>10 July</i> |
| | <i>Terms of engagement – legal jurisdiction, attribution, conflict of interest, team formation, indemnification</i> | <i>17 July</i> |
| | <i>Revise the KSS Work Plan</i> | <i>24 July</i> |
| | Develop draft branding materials | <i>31 Aug</i> |
| | Provide nominations for the advisory council | <i>ongoing</i> |
| <i>CIMMYT</i> | Provide nominations for the advisory council | <i>ongoing</i> |
| | Make executive briefing for the new director Include KSS and/or its affiliates in the CRP proposals | |
| <i>CU's Earth Institute</i> | Terms of engagement – intellectual property | <i>17 July</i> |
| | Sustainable Development Goals 2 pager | <i>24 July</i> |
| | Prepare list of prospective funding clients and potential customers | <i>24 July</i> |
| | Draft a paper for a high-profile / fast publication journal highlighting the challenge and novel approach provided by KSS | <i>31 July</i> |
| | Provide nominations for the advisory council | <i>ongoing</i> |
| <i>CSIRO</i> | <i>Terms of engagement – intellectual property</i> | <i>17 July</i> |
| | Tools to cope with unknowable futures across nexus issues 2 pager | <i>24 July</i> |
| | Provide nominations for the advisory council | <i>ongoing</i> |
| <i>IASA</i> | 2-way synchronous coupled models 2 pager | <i>24 July</i> |
| | Provide nominations for the advisory council | <i>ongoing</i> |
| <i>ORNL</i> | Monsoon Intervention 2 pager | <i>24 July</i> |

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|---------------------|--|----------------|
| | Provide nominations for the advisory council | <i>ongoing</i> |
| <i>UW - Madison</i> | Refine KSS prospectus | <i>17 July</i> |
| | KSS interactions with R!SE 2 pager | <i>24 July</i> |
| | <i>Revise the KSS Work Plan</i> | <i>24 July</i> |
| | <i>Gather nominations for KSS advisory council</i> | <i>ongoing</i> |
| | <i>Organize UNISDR Global Risk Model meeting for Q4 2015</i> | <i>ASAP</i> |