

Action Plan and Budget 2015

Global Decision Support Initiative (GDSI)

12 March 2015

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1. Introduction

This action plan for GDSI, the Global Decision Support Initiative, was developed after the official onset of the GDSI January 2015. The plan describes the planned activities in the GDSI for its first year. However, many unforeseen actions may occur during 2015, and all activities will be reported in the annual report 2015.

The 2016 action plan for the GDSI will be prepared by 1st September 2015.

2. Education and teaching

Project / area	Description	Objective for 2015	Responsible
Summer course	Science-based decision support on risk and sustainability issues are spreading rapidly all over the world and developing rapidly in a number of system areas: food production, water management, transport infrastructure assessment and natural hazard risk mitigation.	<ul style="list-style-type: none">This course will describe the concepts, models and metrics used in different engineering areas of risk and sustainability important for the development of societies.Min. 20 students admitted	Jørgen Schlundt
Mapping of RISK activities at DTU	Mapping research, education and advisory activities related to risk assessment and risk management at DTU Management, DTU Environment, DTU Food, DTU Civil Engineering, DTU Transport, and DTU Compute. The deliverable is an internal report.	<ul style="list-style-type: none">Deliver an internal report comprising six sub-reports on each respective department and an overall discussion and analysis of the findings, including recommendations about how the collected knowledge can be applied by the GDSI, the involved institutes and all of DTU	Linda Nielsen
Cross disciplinary seminars	Each member of the Academic Board will give a 2-3 h presentation of his/her and the institute's expertise and relevance to the GDSI	<ul style="list-style-type: none">The first seminar with participation of director, the Academic Board and PDs: 19 March	Director + Academic Board

3. Research

3.1 New initiatives and development of existing research areas

Research related to risk- and sustainability management and decision support in at least six areas will be initiated during 2015: Food, Environment, Transport, Compute, Management and Civil Engineering.

3.1 Project / area	Description	Objective for 2015	Responsible
Individual PD work plans	First issue of a 3-year work plan for each PD	<ul style="list-style-type: none">Within 4 months of their employment each PD develops a work plan for her/his activities 2015-2018 together with her/his supervisors and present it at (1) an AB-meeting (2) a QSA lunch meeting, and (3) his/her mother institute	Yado, ebor, sgeo, stman, hjds, simone Miraglia + academic board
Journal club	The director initiates a journal club for PDs, PhDs and professors of the GDSI in the first half of 2015	<ul style="list-style-type: none">The Academic Board suggests central research/review papers to be read by all GDSI participantsThe director find dates for journal club meetings where the papers are discussed to assist the steep learning curve for all partners involved in the GDSI	henrsa + academic board

		<ul style="list-style-type: none"> The director saves all papers in a common freeware database 	
Identical initiatives globally?	Screen the web for other GDSI-like initiatives	<ul style="list-style-type: none"> For inspiration and potential collaboration the global environment will be screen by a web-search for initiatives that look like the GDSI. If relevant parties are identified they will be contacted If relevant the director will pay a visit to potential collaborators, or invite them here 	henrsa
Mapping of RISK activities at DTU	Mapping research, education and advisory activities related to risk assessment and risk management at DTU Management, DTU Environment, DTU Food, DTU Civil Engineering, DTU Transport, and DTU Compute. The deliverable is an internal report.	<ul style="list-style-type: none"> Deliver an internal report comprising 6 sub-reports on each respective department and an overall discussion and analysis of the findings, including recommendations about how the collected knowledge can be applied by the GDSI and DTU management. Workshop with all relevant participants to discuss common interests and actions (GDSI) 	Linie, jors
Establish more strategic funding plans	The GDSI Academic Board Each works towards a more strategic approach to funding, rooted in academic profiles and strategic development objectives	<ul style="list-style-type: none"> Based on academic profiles identify prioritized funding sources Develop a plan for addressing prioritized sources over coming periods 	all AB-members

The PDs work in a cross-disciplinary team in a common geographic location at DTU ME with 3-4 supervisors with different background. This is essential to the GDSI-idea. **S**: Supervisor; **C**: Co-supervisor.

PDs: <i>Subject areas</i> → Supervisors ↓	Yan: <i>Metrics</i>	Simona: <i>Frame-work and platform</i>	Stylianios: <i>Uncertainty</i>	Elena : <i>Food</i>	Hjalte: <i>Water Management</i>	Stefano: <i>Transport</i>
Michael Hauschild	S			C	C	C
Michael Faber	C	S	C	C		
Bo Friis Nielsen		C	S			C
Tine Hald			C	S		
Karsten Arnbjerg-Nielsen		C	C		S	
Kim Bang Salling	C				C	S
Jørgen Schlundt	C	C				

3.2 Publications and presentations

Project / area	Description	Objective for 2014	Responsible
Review papers (internal or submitted to international journals)	Review of work area	<ul style="list-style-type: none"> Within 6 months of their employment each PD completes a working paper as a review of their field with relevance to the GDSI 	PDs+Academic Board

		<ul style="list-style-type: none"> If relevant, the contributions are transformed into review papers for scientific journals, possibly with more GDSI co-authors on each. 	
Conference contributions	Identify relevant scientific societies and consider participation/contribution to a relevant conference	<ul style="list-style-type: none"> Within 6 months of their employment each PD completes a list of societies that represent their field Within 6 months of their employment each PD completes a plan for conference contributions and co-authors 	All PDs
Position paper	The members of the Academic board co-author a position paper on the GDSI	<ul style="list-style-type: none"> The paper is completed before the end of September, i.e. before the GDSI DTU presentation meeting in October The paper will be submitted to a relevant international journal before the end of the year 	All academic Board members: A lead authors to be found
DYNAMO article	The director contacts DYNAMO for a journalistic processing of the position paper into an article for DYNAMO, and possibly other popular scientific journal	<ul style="list-style-type: none"> Making the GDSI known to the general DTU environment, and beyond in the national university/business/industry environment. 	director

3.3 Planned applications*

3.3 Funding Source (specific)	Subject	Approx. scope (net sum overall and DTU ME part, in KKR)	Major collaboration partners (please note if / which alliance partners are involved)
Villum Fonden	Basic expenses for expanding the GDSI within its first 3 years	2.500	GDSI director backed by the GDSI Academic Board and Niels Axel Nielsen
Innovations Fonden	Scientific input to labelling of food with regard to health and animal welfare... and possibly more.	≥ 5.000	Tiha, jors, henrsa, ebor COOP and WiKiLCA has been approached for collaboration
Erasmus Mundus PhD Scholarship	Basic cost for a GDSI PhD student for 3 years	1.500	DTU Civil Engineering, Michael Havbro Faber

*Note: A large number of applications have not been planned yet.

4. Research-based consultancy

4 Project / area	Description	Objective for 2015	Responsible
Product specification	Before the GDSI can offer research-based consultancy	<ul style="list-style-type: none"> The GDSI Academic Board describes/specifies the expected product that the GDSI-modelling delivers – what can it be use for? 	GDSI Academic Board
DTU-UNEP collaboration	Initiate any relevant collaboration with DTU-UNEP	<ul style="list-style-type: none"> Initial meeting between DTU-UNEP and GDSI (director+) to clarify possibilities: before summer Meeting between the GDSI Aca- 	Henrsa + Academic Board

		demic Board and DTU-UNEP: September 2015	
Surveying the need for GDSI consulting services	A range of possible consultancy recipients will be investigated	<ul style="list-style-type: none"> • Possibilities of accessing 'Myn-dighedsbetjening/ rammeaftaler' to be discussed at the steering committee's 2nd meeting 2015 • Contacts to corporate world: A list will be prepared in 2015 (first contacts in 2016) 	Henrsa + mzha + Nani/ steering committee
Matching competences	The Academic Board lists missing competences in the GDSI, and make contact to relevant DTU institutes and individuals	<ul style="list-style-type: none"> • A list will be prepared in 2015 (first contacts in 2016) 	Henrsa + Academic Board

5. Innovation

5.1 Student innovation - Is not expected to be initiated in 2015.

5.2 Collaboration with enterprises - Is not expected to be initiated in 2015.

5.3 Commercialization - Is not expected to be initiated in 2015.

6. Partnerships

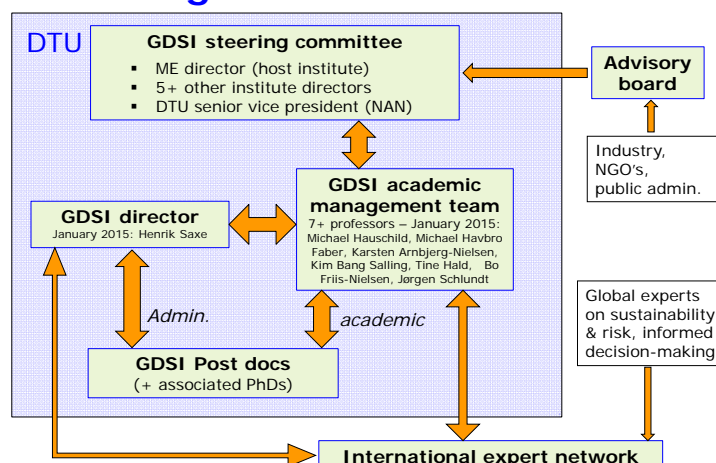
6 Project / area	Description	Objective for 2015	Responsible
COSI	GDSI has from the beginning been a partner in COSI, collaboration on sustainability research, education and innovation between DTU (GDSI), CU (SSC, Sustainability Science Centre; http://sustainability.ku.dk/da) and CBS (CP, sustainability platform; http://www.cbs.dk/viden-samfundet/business-in-society/sustainability).	<ul style="list-style-type: none"> • Develop a common COSI homepage • Develop core courses for a COSI joint Master Certificate • Take initiative to public talks by internationally recognized speakers to be hosted at the three Universities in turn, and to include 'opponents' from non-hosting Universities. 	henrsa, mzha

7. Human resources

7.1 Organization

The organization is described in the diagram given below:

GDSI Organizational chart



The Academic Board meets 15 times during 2015 for 2–4 hour meetings, and the Steering Committee typically meets twice a year. The international expert network and advisory board are planned to be appointed in the 2nd half of 2015. All 6 postdocs have been hired beginning late 2014 up until 1 April 2015. One was hired for 4 years as an assistant professor, and will spend 2.5 days at the GDSI, while all postdocs will spend at least 4 out of 5 days at the GDSI. Other days are spent at the mother institute.

7.2 Leader and leadership development

The director participates in work environment related education 2015-2017 (University level). The DTU leadership education is under consideration for 2016.

7.3 Employee development

PDs are allocated a 2015 budget of 20.000 kr. by their mother institutes for participation in courses and conferences.

7.4 Attracting and recruiting

This may follow as financed by external funds aimed at supporting GDSI's research and possible expansion of the GDSI to include more DTU institutes and individuals.

8. Material resources

8.1 IT

Each PD and the director have been supplied with a laptop, docking station, external screen, keyboard, and mouse. The IT equipment will be supported by ME, while software will be supported by the mother institutes.

8.2 Laboratory equipment/scientific infrastructure

None

8.3 Premises

The GDSI has been allocated two large offices at B424 2nd floor. This will suffice for 2015.

The offices have been furnished by ME, and a minimal degree of interior decoration will be taken care of by the director in collaboration with the PDs within a GDSI-budget of 5.000 kr.

9. Communication

- A plan for communication will be developed by the director in collaboration with the Academic Board in the first half of 2015
- The GDSI will be presented by the head of the AB on a public meeting at DTU in October.
- A business plan will be developed by the director in collaboration with the Academic Board in the first half of 2015
- A new GDSI homepage will be developed by the director with assistance from 101 and ME's communicator, and kept updated by the director and PDs
- Printed communication material will be developed by the director in collaboration with the AB. Until then the original flyer in an updated version will apply. The director develops this update.
- GDSI business cards will be printed for directors, PDs and AB-members
- The story of the GDSI will be written and submitted to the local newsletter at each GDSI institute

10. Process and employee involvement

The Action Plan 2015 has been developed mainly through discussion between the director and the Academic board. In 2016 we envision a larger participation by the PDs.

The action plan serves as a main document for regular discussions with the GDSI steering committee and the host institute, DTU Management. Discussions with DTU ME follow the DTU 'årshjul' (UMV, action plan and annual report preparation).

11. Budget

Budget as adopted by the AB (It will be discussed on the next GDSI steering committee meeting in May for final approval). The budget will be revisited in September with a possible increase of 6×5.000 kr.

Support from the 6 institutes: 6×25.000 kr. = 150.000 kr. (Cap)

Postdoc + director job advertisements (posted 2014)	50.000 kr.
COSI opening meeting (2014)	2.500 kr.
COSI annual meeting (2015)	2.500 kr.
Meeting expenses of GDSI's AB	25.000 kr.
Office interior decoration	5.000 kr.
Courses/transport/travels/conferences (director)	40.000 kr.
Communications, branding, events	10.000 kr.
<u>Software</u>	<u>15.000 kr.</u>
<u>Total:</u>	<u>150.000 kr.</u>