



**NICOLE**

Network for Industrially Co-ordinated Sustainable Land Management in Europe

## Call for Abstracts – November 2018 Workshop – Bristol, UK

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### Data & Risk

Data quality + Data management & Visualisation + Risk management

#### **NICOLE Fall workshop 2018 Bristol, UK**

*15-16 November 2018, at M Shed, Princes Wharf, Wapping Road, Bristol, BS1 4RN United Kingdom*

The power of data is being increasingly recognised in industry and society as a whole. Our ability to collect and manage data is being transformed by field instrumentation, communication methods and software. Legislation has been introduced across Europe in the form of the General Data Protection Regulation (GDPR) to protect personal data. Risk assessment methods are thirsty for good input data to provide ever more reliable outputs on which we base massive decisions about environmental protection. Data collection methods, data management and ownership, the use of data and economic value of data are now in the spotlight for individuals, private companies and public bodies alike. In summary the “Big data revolution” is at our doorsteps and is expected to drive “big changes” in the way people, society, business and governments go about their day-to-day activities.

How can we benefit from the fast –paced technological advances? How can data management help to shape risk assessment methods and future project management? How can we create added value for problem holders by enhancing risk analysis with better input data? How can we store and protect data generated by ourselves and our companies? How does GDPR impact our business? How can we share such data to enhance our understanding of risk and the need for remediation?

Data provides a communication vehicle for a range of end users (landholders, regulators, designers, urban planners, construction professionals) to evaluate, reduce and manage project risks. It also fundamentally underpins technical risk assessment, and provides the opportunity to improve inputs and avoid the “rubbish in, rubbish out” syndrome.

Innovation can bring great changes in the collection of data, interpretation, sharing, and visualization. The lack of industry standards and apparent absence of common practice in data modelling and visualization are areas that warrant further consideration, particularly in the context of risk assessment.

The main themes of the Workshop are:

#### 1. Ownership of data

During large redevelopment projects, many different stakeholders are involved, for example the owner of the land, local authority, engineering companies, redevelopment/real estate companies, and urban planners.

Data processing, management and the form of the output often vary between organisations, which can lead to large inefficiencies in the industry.

- Which party is the “owner” of the data is still a debatable question?
- What innovative solutions could synchronize and empower data?
- What can NICOLE Members do to implement such solutions?



## 2. Data collection and use in risk assessment

There is a range of new technological developments in the collection of data, from using satellite outputs to downloading 'live' water resource information. There are also new approaches to risk assessment which need ever more sophisticated data.

- How do we ensure that positional data is known accurately and on a common basis?
- What will be the best way to integrate data from different sources?
- How can we ensure the data are fit for purpose and improves the outputs from risk assessments?
- How can we design investigation work to deliver the right data?

## 3. Data Visualization

Good data visualization will help to analyse and to shape the overall project process, including project planning, execution and coordination with diverse stakeholders.

- Innovation in data visualization [not limited to, but might include virtual reality, augmented reality, 3D printed models];
- Incorporating uncertainty analysis in data visualization;
- Visualization for communicating risk;
- Development of common practice for data visualization;
- Generating new approaches to reporting.

## 4. Data & Sustainability

- What role does 'big data' play in the circular economy and land management, the triple-P (economic, social and environmental) bottom line and development of natural capital?
- Will big data enable greater opportunities to promote sustainable concepts?
- Could big data be used at a national/European/Global level to enhance sustainable practice and underpin the implementation of legislation?
- What is needed in terms of knowledge development and transfer?
- What are the risks and weaknesses of applying big data to sustainability?
- Do we understand the socio-economic value of the data we collect?

## 5. Data management and sharing

- The need for and value of common data platforms amongst consortia of companies in major infrastructure projects;
- Lessons learned, what would work and what may go wrong;
- Good practice & poor practice are both welcome;
- What value is there in making data public via national databases?
- What safeguards can we put in place? And how effective are these?

**PLEASE NOTE THAT THERE WILL BE A SEPARATE OPPORTUNITY AT THE WORKSHOP FOR DEMONSTRATION OF DATA MANAGEMENT AND VISUALISATION SYSTEMS – A SEPARATE CALL WILL BE ISSUED IN RELATION TO THIS.**



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## SUBMISSION GUIDELINES

Authors are required to submit a one-page abstract of the paper they would like to present (presentation or poster pitch presentation), together with an outline of the structure of the paper and short biography. The submission should be a maximum of 2 pages including abstract, outline and biography

Abstracts which include case studies are encouraged, particularly those highlighting problems encountered, lessons learned and identified solutions, and should address some of the following questions:

- How does the proposed paper bring innovation to data and risk management?
- What is being done differently to traditional approaches?
- How has ownership of the final outputs been addressed?
- How have common platforms been identified and set up?
- How is big data affecting the approach to risk assessment?
- How are data and meta-data being protected?
- What use is big data being put to for complex environmental situations?
- Is there a particular software package or tool used and how available is this?
- Are there limitations in sharing big data and risk outputs with third parties such as Regulators?
- How does the approach to data and risk enhance the sustainability of the project?
- Does more data make for better risk assessment?
- Will 'big data' automation lead to a reduction in jobs/roles or does it bring new opportunities and challenges??
- Where will the 'big data' revolution lead us to in 5, 10 and 20years time
- Do we understand the socio-economic value of the data generated?
- Are we personally responsible for our data fingerprint? And are we enabled to control this at an individual level?
- How has the case study embraced sustainability concepts such as the circular economy, the triple-P (economic, social and environmental) bottom line and development of natural capital?
- What role could NICOLE play in its new focus on sustainable land management and land stewardship to learn from the case study and promote good practice?
- What is still needed in terms of knowledge development and transfer?

Abstracts should be sent by **1 August 2018** to the NICOLE Secretariat, email: [nan.su@nicole.org](mailto:nan.su@nicole.org)

Abstracts will be considered by the Organising Committee. The authors of abstracts will be notified of acceptance of their submissions for either a presentation or a poster by **1 September 2018**. Speakers' final abstracts and presentations must be submitted by **5 November 2018**.

The workshop will take place at *M Shed, Princes Wharf, Wapping Road, Bristol, BS1 4RN United Kingdom*



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**CHAIR AND MEMBERS OF THE ORGANISATION COMMITTEE:**

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