2.   Resilience Shift
Dr. Juliet Mian, Technical Director Resilient Shift

Short summary (0:00 – 24:35; see also the slides)
Introduction video, see: https://www.resilienceshift.org/#video
Resilience Shift focuses on three pillars:
- Influencing policy
- Shaping practice
- Sharing learning

This led to 10 insights for resilience:
- Thinking about whole systems
- Overcoming fragmented governance
- Engaging the whole value chain
- Managing deep uncertainty
- Adopting technology to enhance resilience
- Focusing on outcome-led approaches
- Demonstrating the benefits of resilience
- Transferring knowledge widely
- Developing guidance and standards
- Becoming safer, resilient and more sustainable

New General Director (Seth Schultz): focusing on large interdependent systems, e.g. ports: Resilience4Ports

Reflecting on the Covid-19 crisis and its implications for resilience:
- New and significant changes and deep uncertainties to deal with
- How can we transfer to a new normal (safer, resilient and more sustainable)?
- Learning from crisis: the importance of resilient leadership

Q&A (24:35 – 1:10:15)
How many people involved? (24:25 – 26:32)
- *Resilient shift designed to sit within ARUP for 5 years, then stand-alone*
- *Core team: 8-9 people (most part-time)*
- *+/- 40 grants for work/projects etc.*

Public space (27:12-30:30)
Reflections on Covid: How do you consider public space in relation to the crisis? Do you consider it as critical infrastructure?
So far we have focused more on the critical infrastructure, but it is very important, and should be considered from the perspective that we have to look at the whole system.

Stakeholder- and knowledge management (31:15-35:42)
Stakeholder- and knowledge management around climate resilience. Resilience is complex, so we do involve professionals, politicians, etc but how to involve other stakeholders (e.g. citizens, interest groups, communities)? Do you have examples?
City water resilience approach; 2 stages:
1) *Developing framework (globally 8 cities involved; workshops per city with 45-50 people)*
2) *Pilot City water resilience approach in 2 cities (cape Town and Miami): use the framework, do an assessment, prioritize interventions*

Systems thinking and complexity thinking (35:52 – 40:53)
Need for systems thinking and complexity thinking: Examples of cases where you were successful in applying systems approach, looking across systems?
- *Resilience4Ports*
- *Legislation in Victoria, Australia on resilience planning for their critical infrastructure. Organizations had to share their risk assessments, plans, get together and go through scenario's jointly*

Creating awareness and common understanding is very important first step.

Political feasibility (41:28 – 46:13).
Political feasibility of the ideas/solutions that Resilient Shift proposes?
Is indeed a challenge. Key is something like the "National Infrastructure Commission". They advise governments; 30 year time-horizon

Decisions about resilient infrastructures (46:32 – 51:18)
Decisions about resilient infrastructures (infra-management decisions have consequences for decades): where do the questions of resilience, adaptability, learning, etc come in, and when and from whom?
- *At the moment main driver for major infrastructure decisions is still economy; resilience tend to come more in at planning and design stage*
- *It is perhaps an even more important question for the existing infrastructure (good example: Thames Barrier as part of the Thames Estuary Strategy 2100; adaptive pathway approach). Still not very common*

Role of scientific research (51:20 – 59:50)
To which extend does scientific research play a role / do you use scientific research in the work of Resilient Shift
- *Focus has been on putting theory to practice*
- *Within the resilient leadership activities we are collecting a lot of interesting data. We have to see what we can do with these data and whether we can transfer them to others for more research*
- *It would be good to communicate back more to science about the gaps we identify*

This emphasizes the added value of this session and a collaboration between Resilient Shift and 4TU.RE
- Can we get in contact with the stakeholders / contribute to the specific cases?

Direct interaction with current cases not possible, but probably in follow-up work.

Is resilience a lens or a built-in feature? (1:00:04-1:04:08)
Do you see resilience as a lens that can help improve the resilience of a certain asset or should it be an built-in feature?
We should focus on the qualities of resilience (adaptability, diversity, redundancy; challenge with that: what does that mean?) Otherwise we will focus on just managing risks. Terefore we are also working on a book of good practices / good examples.

"OurWater" (1:04:19 – 01:10:15)
Cool "OurWater" online tool (https://app.ourwater.city/). Difficult to evaluate what outcome of collaboration is. Do you regognize this?
Yes. So far tool is only used to a limited extent. One good example Hull: OurWater helped to map the stakeholders/collaboration and raises awareness of the fragmentation and how that creates problems. That helps to start move things (but usually does not solve it completely).

Possible next steps (1:10:15 – 1:22:43)

- You have identified gaps in existing theory from the user perspective. That is where we could step in. Or we can test our theories on specific cases. Resilient Shift is important to make systems more resilient. For researchers it is also important to have a direct link with practitioners who try and make systems more resilient.
- How do you (want to) collaborate with scientists/researchers?
  E.g. steering group from Resilient Shift on research projects that you are working on and/or members of 4TU.RE / other scientists as member of scientific steering group for Resilient Shift projects (e.g. Resilience4Ports). Two-way structure on case-by-case basis
- Several levels of collaboration possible:
  o Developing tools: e.g. certain kinds of tools for coastal resilience, urban resilience, etc
  o Developing Methods: workshops are a good way to learn for and about resilience: to raise awareness, to work together with different disciplines/actors (= joint methodology)
  o Developing the approach. You focus on communication is interesting; we share an interest to develop good visual communication and could collaborate on that.
- Regular joint workshops of half a day
- Invite each other for specific workshops
- What is your policy on the data you collect?
  o *For OurWater it stays within Resilient Shift*
  o *Resilience leadership: Juliet would like to do something with it / share it, because we only get the full value out of it if we can really use/analyse the data (90 hours of recordings with decision makers). However, it should be anonymized. Juliet will think about this: what should be dome to use these data further?*
- Contact Juliet if you have any further suggestions / questions!