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# Context

- › Denmark has a national network for research climate-services since 2006 hosted by AU/DCE (KFT)
- › Stakeholder meetings since 2006 - the 2014 annual meeting of the network was dedicated to the national dialogue – but the dialogue is ongoing
- › Invited across the network to participate, and invited a panel of stakeholders (researchers and planners)
- › We explained about the JPI and WG2 ongoing work and the European challenges for climate service provision, as background for the dialogue – and informed about the climate-knowledge hub



# Context



- › Members of the network include all relevant research institutions in Denmark (public and private)
- › We invited specific climate services users, municipal (Copenhagen), and private (association of insurance industry of Denmark) to the panel
- › About 35 people attended the dialogue (held 5/3-14), from the network and from private consulting companies
- › Klimatilpasning.dk is of course also a community resource as well as municipal and business ditto
- › We used the JPI WG2 guidance report as a starting point for the dialogue



# Key findings



## > Who are the suppliers?

- *Hard to separate suppliers and users – often they are both it's a long supply and demand chain*
- *CS (DMI) is the initial data suppliers to public and private*

## > International aspects?

- *Users are Danish and initial provision is a public task*
- *Users need national projections – hard to see user driven commercialization of initial CS in DK at this stage*
- *Need to clarify legal and economic liabilities and responsibilities relative to commercial CS data provision*
- *No experience with PPP on the CS area in DK*
- *Concerns about commercialization will harm scientific exchange – who would pay for the initial standard data?*



# Key findings

- › Long term vs short term risks (DRR vs. adaptation)?
  - *It is understandable that the focus is in near term and recent extremes such as flooding – need to collect experience afterwards*
  - *It is the researchers responsibility to also maintain focus on the long term needs*
- › Uncertainties?
  - *Need to clarify what we can and cannot deliver*
  - *Provide realistic best- and worst-case scenarios for decision-making*
  - *Generally the uncertainties in the initial data are less than the subsequent data and decision-making*
  - *We actually know a lot from e.g. the IPCC reports CS must qualify the data*



# Key findings



## > Uncertainty management?

- *Need to plan also in the long term*
- *Don't be afraid of uncertainties - avoid paralysis by analyses*
- *Adaptation shall be: flexible; low-regret; risk based*
- *Can't protect everything - need to understand the risk aversion/acceptance level*
- *Copenhagen will invest approx. 2 bill Euro in adaptation over the next years - hence knowledge of uncertainty is valuable*
- *We should prioritize the different risk sectors and their inherent costs and target the uncertainties associate to these first for cost-effective management*
- *CS data shall be translated contextually in the reality - e.g. CS data relative to e.g.: engineering; agriculture; heath care, etc.*



# Key findings

## > Knowledge gaps?

- *Greater need to accurately translate the CS data to relevant user needs – i.e. need better assessment of the users needs*
- *Assessment of high vulnerability and risk areas and sectors – where we can loose irreplaceable values and human lives*
- *Need for regional and local down-scaled climate data and mapping*
- *Easy access and downloadable climate data, e.g. national temperature map and projections of precipitation*
- *Not only to focus on extreme rain but also important sectors e.g. such as agriculture and health*



# Conclusions

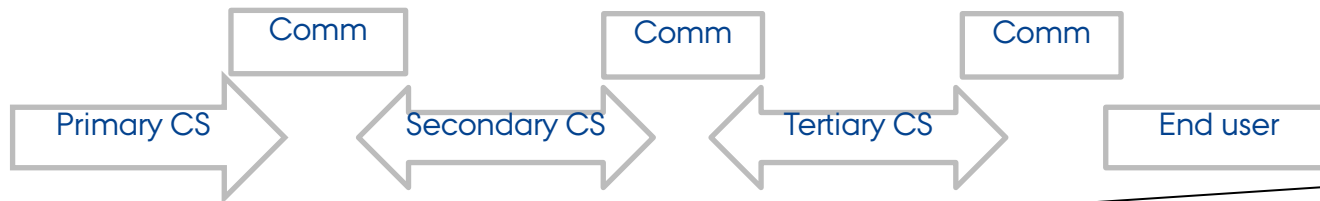
- › We informed about the next steps both in JPI and in the national dialogue – to maintain the organization and plan for a next meeting with a focus on the users
- › There are until now only 3 CS in Denmark who have signed up in the Climate-Knowledge-Hub (DMI; DTU; AU) – these are the primary CS in DK
- › Very important to answer the ‘So-What’ question to decision makers
- › Again most are both providers and users





# Conclusions

- › There are several tiers between primary CS providers (e.g. DMI), secondary CS (e.g. DTU and AU), and end users – hence most are both providers and users but not end-users – translation and communication is needed between tiers:



uncertainty; relevance; impact; cost → So What?





# Thank you for your attention

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The screenshot shows a web browser window with the URL [ecca2015.eu](http://ecca2015.eu). The page features a green header with the ECCA logo and a map of Europe. The main content area includes the text: "12<sup>th</sup> to 14<sup>th</sup> May 2015", "Bella Center Copenhagen", and "Copenhagen Congress Center". A large photograph of the modern, glass-fronted Copenhagen Congress Center building is displayed. On the right side of the page, there is a vertical text block: "Invitation to sponsorship exhibition n available Please see 'Partners' c Peder Anderse exhibition@dis". The footer contains a navigation menu with "WELCOME" and "ABOUT ECCA 2015", a "Welcome" message, the website URL [www.ecca2015.eu](http://www.ecca2015.eu), and buttons for "EMAIL" and "PRINT".

## Adaptation conference and expo