# Workshop rising sea levels 

Kring 2018, Ystad Sweden

## Questions:

1. Which projections/scenarios are you using in your country/organization for global mean sea level rise by 2100?
2. What is the highest projection/scenario for global mean sea level rise by year 2100 you are using?
3. Which time perspectives are you considering?

| Country/organization | Projection/scenario | Sea level rise 2100 | Time perspective |
| :---: | :---: | :---: | :---: |
| Germany (SchleswigHolstein) | IPCC AR 5 | High-end scenario + 1.5 m from 2000 until 2100 | 2050 and 2100 |
| Portugal (EA) | IPCC AR5 with safety factor | +1.5 m from 2000 until 2100 | 2050 and 2100 |
| Denmark (Coastal authority) | All, especially lowest and highest | +1.2 m from 2000 until 2100 | Technical lifetime |
| Netherlands (Deltares/RWS) | KNMI 14' based on IPCC AR5 (In 2021, new KNMI scenarios, new Deltares report) | +1 m from 2000 until 2100 <br> (high uncertainty; $+2^{\circ} \mathrm{C}$, $\mathbf{+ 0 . 3 - 1 . 9 \mathrm { m } \text { in }}$ 2100; $+4^{\circ} \mathrm{C}$ 0.7-3.2 m in 2100; until 2050 no significant effects) | 2030, 2050 and 2100 |
| Netherlands (HHNK) | KNMI 06 | + $\mathbf{0 . 8 5} \mathbf{~ m}$ for maintenance zones, $\mathbf{+ 0 . 6} \mathbf{~ m}$ construction works | Managment zones 50-200 years; construction lifetime about 25 100 years |
| Netherlands (Tauw) | KNMI 06 W+ | Compared to 2017: 0 m until 2023; 0.25 m until 2050; 0.75 m until 2100 | Lifetime, most projects 2075 2100 |
| Belgium | Projections are derived from KNMI \& Deltares report | Vision: Protection scenario for 2100 is $\mathbf{+ 3} \mathbf{~ m}$ worst case, + $\mathbf{2} \mathbf{m}$ moderate case. <br> Masterplan: +0.3 $\mathbf{m}$ till 2050 and $\mathbf{+ 0 . 8} \mathbf{~ m}$ till 2100 | Masterplan Coastal Safety (works in progress) 2050 Complex project kustvisie (long term vision) 2100 |
| Sweden (Ystad) | IPCC AR5 | +1 m from 1990 until 2100 | 2025, 2050, and 2100 |
| England (EA) | UKCP09 based on IPCC AR 4, later this year UKCP18 based on IPCC AR 5 | High sea level rise scenario $\mathrm{H}++$, +0.9-1.9 m by 2100 . | Guidance until 2100, new research about projections until 2300 |

Country/organization
Projection/scenario
High-end scenario + 1.5 m from 2000 until

Technical lifetime

Managment zones 50-200 years; construction lifetime about 25 100 years

Lifetime, most projects 2075 2100

Masterplan Coastal Safety (works in progress) 2050
Complex project kustvisie
(long term vision) 2100
2025, 2050, and 2100
Guidance until 2100, new research about projections until 2300

## Discussion

- Formulate design conditions and strategies for flood protection of a city with 20,000 inhabitants with respect to sea level rise. The time perspective is 150 years.

