Workshop rising sea levels

Kring 2018, Ystad Sweden

Questions:

- 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 (Schleswig- Holstein)	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 (high uncertainty; +2°C, + 0.3 – 1.9 m in 2100; + 4°C 0.7-3.2 m in 2100; until 2050 no significant effects)	2030, 2050 and 2100
Netherlands (HHNK)	KNMI 06	+ 0.85 m for maintenance zones, +0.6 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 +3 m worst case, +2 m moderate case. Masterplan: +0.3 m till 2050 and +0.8 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 H++, +0.9-1.9 m by 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.