

#	QUESTION	ANSWER	
1	How do you validate that a catchment identified as high I&I actually has physical defects rather than simply a higher proportion of groundwater infiltration or wet weather response?	Thanks for the question. You could confirm it with multiple lines of evidence: correlate flow with rainfall and groundwater, localise the excess flow with subcatchment monitoring, then confirm physical defects using CCTV/manhole inspections or smoke/dye testing. Ideally, repair and demonstrate a reduction in I&I afterward. We'll get Lars' input and experience as well.	Pierre Hoevelt
2	Does the platform distinguish between rainfall derived inflow and longer duration groundwater infiltration, or is that separation still reliant on engineering interpretation?	Yes it does automatically find what is direct rainfall inflow ("fast rainfall impact"), rainfall derived infiltration ("slow rainfall impact"), and groundwater infiltration	Lars-Goran Gustafsson
3	For Use Case 4, what are the water quality parameters that can be assessed?	Per default/standard we include P _{tot} , N _{tot} , and BOD, but possible to add others if required	Lars-Goran Gustafsson
4	Are the KPI rankings stable across multiple storm events, or can a catchment move significantly up and down the rankings depending on the rainfall characteristics of a particular event?	If the flow component in questions by nature is affected by soil moisture content and seasonal weather variability (like rainfall derived infiltration) it will vary over time, from event to event, while the median value over a full season will vary less between multiple seasons, if no particular changes has been made, as we for most KPI's include the rain volumes, and in that way normalise KPI's with respect to yearly rainfall volume. On the other hand, direct rainfall inflow, mostly related to connected impervious area, will vary much less from event to event, dependent on the data quality, eg how well the rainfall is represented over the catchment area in question.	Lars-Goran Gustafsson
5	When you send the signal to the pump for longer pumping, does it go directly to the pump, or we need to manually give command?	All control signals, like setpoints and direct settings, can be automatically transferred to the end-users SCADA system. From there the end-user can decide whether it should be automatically transferred to the local controller of a pump, valve or gate - or manually checked before it is sent further. Also possible to send it directly to the local controller of the controllable structure.	
6	What's the minimum input data to allow the platform to be used with confidence or can it mostly be modeled using existing data inputs?	Live answered	Pierre Hoevelt
7	How did you decide the lower and longer pumping rate	Live answered	Pierre Hoevelt
8	How are rainfall-runoff hydrological models and real-time SCADA sensor data integrated into DHI CityFlow Live to forecast combined sewer overflow (CSO) volumes and treatment plant inflow capacity exceedance?	Live answered	Pierre Hoevelt
9	Have you used multi-objective optimisation technique for the optimal solutions (pumping, etc)	Live answered	Pierre Hoevelt
13	What is the governing equation to quantify groundwater infiltration? Is it related with Pokrajak Equation which depends on difference of groundwater head and sewer head? To what extent surrogate model was calibrated?	In the Data module, this is primarily defined based on the residual, after subtraction of the rainfall inflow/infiltration and the raw sewage flow, but also the temporal decline of the baseflow is involved	Lars-Goran Gustafsson

14	How much does your system cost (for example that one which you set up for Gothenburg)? What type of hardware does one need for that?	Can not be answered without having more information of the actual wastewater network, number of controllbale structures, size, etc. The cost is divided in a yearly license fee for each module (with 5 tiers depending on the size of the water utility), and an implementation cost. The system can be implemented as a Cloud solution (hardware cost included in the licens fee), or on-prem.	Lars-Goran Gustafsson
----	--	--	-----------------------