# MIKE by DHI 15<sup>th</sup> UK User Group Meeting

## Lion Quays Waterside Resort, Shropshire Draft Agenda - Tuesday 19 March 2013



09:00	Sign up & coffee		
09:30	Intro from DHI*1	Erland Rasmussen (EBR) - Managing Director MIKE by DHI Software: General Headlines	
03.30	mero moni prii	Poul Kronborg (POK) – Business Area Manager (Marine)	
		Torben Jensen (TSJ) – Business Area Manager (Urban)	
		Bastian Rau (BRA) – Porous Media Consultant	
10:30	Arne Vögler - UHI	A general overview of the TeraWatt project and wider context (MASTS, EcoWatt2050),	
20.00	Third region of the	followed by a description of the model domain, boundary conditions, calibration points,	
		and so on.	
11:00	Coffee & cakes	Refreshments and time for a chat	
11:30	Mark Cramman - MWH	Hydrodynamic and Sediment Transport Modelling of Swindale Intake	
		Modification to the existing arrangements at the Swindale intake could negatively	
		impact stilling pond hydrodynamics, which could impact fish passage and gravel	
		management. A 2D hydrodynamic (HD) and sediment transport model (ST) has been	
		applied to assess the potential impact of the proposed works on sediment dynamics in	
		the upstream channel and floodplain and in the proposed stilling pond.	
11:50	Vicky Tonks – Mott	Coastal Protection at Clacton: a multi-model approach	
	MacDonald	Recent experiences with MIKE 21 FM ST and LITPACK while investigating the Clacton	
		beachfront	
12:10	Mike Streetly - ESI	Using FEFLOW to simulate Borehole Thermal Energy Storage	
		Some interesting thoughts and applications of FEFLOW	
12:30	Lunch	Plenty of time for a lovely lunch	
14:00	Ann Saunders – Intertek	Water quality in a Yorkshire lake	
	Energy and Water	MIKE 3 Ecolab was used to model the water quality of a lake in Yorkshire. The study	
	Consultancy Services	concentrated on phosphorus precipitation and associated water chemistry processes.	
14:20	George Mitchell / James	Combined thermal plume from multiple power stations in the Gulf using MIKE3	
	Tomlinson –	We will present a detailed study of the issues involved in modelling multiple thermal and	
	TechnoEconomica/Atkins	hypersaline discharges in to a warm environment. Issues of waste water recirculation,	
		surface heat exchange and vertical stratification will be covered. We will also be	
		offering some suggestions on ways in which this process could be improve in MIKE3.	
		Specifically this will concern ground heat retention and excessive night cooling in shallow waters, and also power station sub-models.	
14:40	ТВС	TBC	
14:50	Barry Hankin – JBA	Integrated Catchment Modelling for the Lower Lee	
14.50	Consulting	Experiences and results	
15:10	Coffee & cakes	Refreshments and time for a chat	
15:40	Jonathan Short - URS	Some interesting modelling experiences with MIKE by DHI software	
16:00	Vera Jones - Atkins	River Almond WQ Study	
		A dynamic water quality model of the River Almond has been developed using MIKE-11	
		Ecolab with an overarching aim of assessing the impact of Scottish Water assets on the	
		water quality of the river. An extensive recent (2011) water quality data set served as	
		the basis for the model's development, which also included inputs from sewer network	
		modelling. The model has been used to identify water quality parameters and specific	
		locations of concern in the River Almond system, providing Scottish Water with a	
		detailed assessment of catchment needs. The work will continue with identification of	
		strategic options to meet the requirements of the Water Framework Directive and the	
		Urban Wastewater Treatment Directive.	
16:20	Yiping Chen – Hyder	Tidal Energy Resources Assessment for Tamar (Plymouth) Estuary Narrows	
	Consulting	Two MIKE21 FMHD models covering the English Channel and the Tamar estuary were	
		developed to carry out an assessment of the tidal stream energy output potential. The	
		Tamar model has been calibrated using continuous ADCP measured data at 3 locations.	
		Three areas of high tidal stream power output potential with a mean tidal turbine	
16:40	M/ran un	output power density were identified in the Plymouth Narrows.	
16:40	Wrap up	Erland Rasmussen	
17:00	Head off to the evening	Dinner is at 19:30	

 $st^{1}$  The training on the second day will include examples of new features, lesser known features and round table discussions.

### MIKE by DHI Training Day

## Lion Quays Waterside Resort, Shropshire Draft Agenda - Wednesday 20 March 2013



#### MIKE 21 Training

09:00	Sign up & coffee		
09:15	What's New in 2012	A round-up of new & lesser known features	
10:00	Round table 1	Feedback from users on their experiences	
10:30	Coffee & cakes	Refreshments and time for a chat	
10:45	Hands On	ABM Lab - Bring your own laptop if you want to follow the demonstration (Optional)	
12:00	Demo	Wave Spectra Converter	
12:30	Lunch	More nice food	
13:30	Hands On	Littoral Processes FM - Bring your own laptop if you want to follow the demonstration (Optional)	
14:40	Demo	Animator PLUS	
15:00	Coffee & cakes	Refreshments and time for a chat	
15:15	Round table 2	General Q&A session with Poul Kronborg (Business Area Manager) & Suzie Clarke (UK Marine	
		Specialist)	
16:30	Head off home		

#### **MIKE FLOOD Training**

09:00	Sign up & coffee	
09:15	Demo: MIKE 21 Flexible Mesh (FM) for Floodplains	Hands on introduction to MIKE 21 FM and Mesh Generation – Bring your own laptop if you want to follow the demonstration (Optional)
10:30	Coffee & cakes	Refreshments and time for a chat
10:45	Breaching in MIKE FLOOD: 5 Ways:  Coupled MIKE 11 Dambreak  Lateral DFS1 Couple  Landslide Option in MIKE 21 SG  Dyke Structure in MIKE 21 FM  Dynamic Mesh in MIKE 21 FM	Explore five (5) different ways of breaching in MIKE FLOOD (methods include the new Q/h boundary)
11:45	Infiltration in MIKE 21	Explore setups that demonstrate the MIKE 21 infiltration methodology and steps to incorporate spatial loss models
12:15	Batch Simulation and Affinity	Control your simulations for better efficiency
12:30	Lunch	More nice food
13:30	MIKE FLOOD AD Coupling	Hands on introduction to MIKE FLOOD AD Coupling
14:15	2D Rainfall Maps in the MIKE Zero Toolbox	Hands on exercise to develop time varying 2D Rainfall Maps
14:30	2D Mapping in MIKE 11 and MIKE FLOOD	Explore the mapping options in MIKE 11 and find out more about how these options can be used to generate integrated outputs (e.g. 2D velocity distribution) and bathymetries
15:00	Coffee & cakes	Refreshments and time for a chat
15:15	General Discussion Forum for Water Resources: Access a DHI Water Resources expert for technical queries & model assistance	Torben Jensen (Business Area Manager) Steve Flood (UK MIKE by DHI Manager) Mark Britton (Corporate Relationship Manager)
16:30	Head off home	

#### **FEFLOW Training**

09:00	Sign up & coffee	
09:15	Introduction to FEFLOW by Bastian Rau (FEFLOW Specialist)	To include:      3D mesh geometries     Concepts of handling free water tables     Pathline analysis     Extending the model to a solute transport model
10:30	Coffee & cakes	Refreshments and time for a chat
10:45	Introduction to FEFLOW	(cont.)
12:30	Lunch	More nice food
13:30	Introduction to FEFLOW	(cont.)
15:00	Coffee & cakes	Refreshments and time for a chat
15:15	Introduction to FEFLOW	(cont.)
16:30	Head off home	