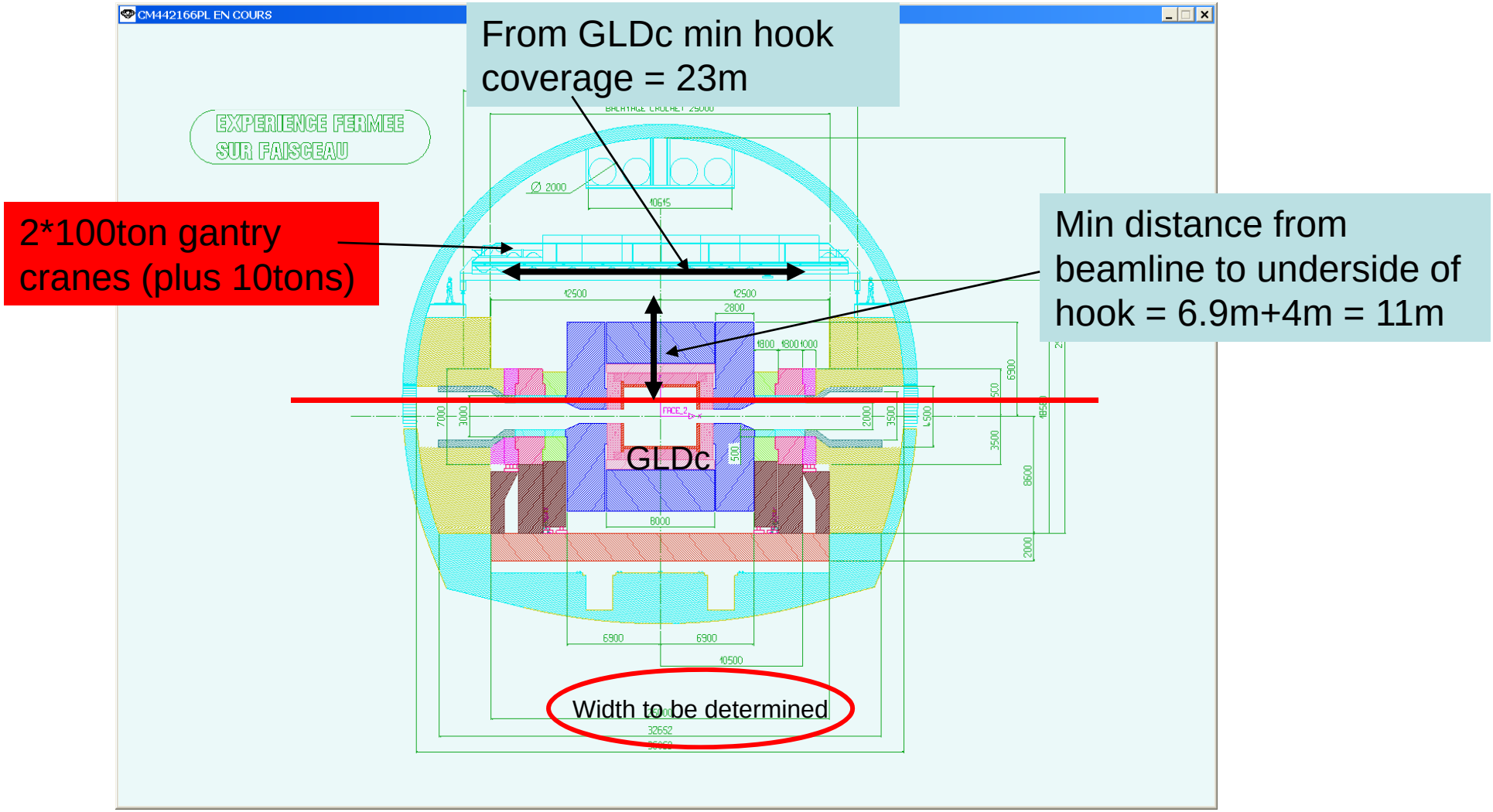IREN07 : Experimental Cavern Criteria