The actions taken in the first 24 hours of a serious well-control incident can mean the difference between eventual containment and severe HSE damage or resource losses. During this chaotic period, immediate initiation of the rapid-response plan is critical in helping prevent the incident from deteriorating into an unmanageable and dangerous situation.

Typically, the crew must sift through a well-control contingency plan (WCCP) to determine the urgent first steps and locate the pertinent contact information – before the emergency response plan can be initiated. If the incident warrants immediate site evacuation, the contingency plan (and the crucial, location-specific rapid-response strategy) might not even be available.

The latest generation of “smart” consumer technologies has opened the door for the development of customized rapid-response plans in an application-based (app-based) format. The WellCall mobility app – compatible with iPhone, Android, and similar smart devices – provides immediate, secure access to the operation-specific rapid-response plan. When operators arrange for the development of a pre-spud WCCP, the integrated site-specific rapid-response program is automatically and securely available through the app, which authorized personnel can access 24/7 using smartphones or tablets.

The user-friendly technology allows pertinent personnel to instantly initiate the tailored response plan during the characteristically frantic hours at the beginning of a well-control incident. The new app-based response module does not rely on emails, allowing immediate access to the emergency dispatch center as long as the caller has sufficient phone service.

The authorized user, once logged in, has instant access to the operator’s operation- and region-specific emergency response plan. The app guides personnel step by step through the procedures required in the critical first 24 hours after an incident occurs, including what should be done, in what order, and by whom. Key features of the app are its direct link to first-responder well-control specialists and to relevant regional governmental agencies.

**Need for easy access**

The rapid-response plan is an integral component of the WCCP, which, in turn, is part of a preventive risk-management program in which well-control specialists evalu-
ate the drilling program, identify potential risks, mitigate those potential risks through proven prevention methods, and develop location-specific blowout contingencies and response plans. The Boots & Coots WCCP can accurately determine the level of acceptable risk. The exhaustive process provides the client with a detailed picture of risk associated with a well-control event.

The rapid-response plan clearly defines the systematic actions to be taken immediately at the onset of an incident, when emotions are running at their highest. Along with all pertinent contact information and the individual roles and responsibilities, the rapid-response plan provides vital site information for the emergency well-control specialists, which helps ensure a successful conclusion to the incident.

By definition, the rapid-response plan must be easily and quickly available. This has led operators to request 24-hour instant access on or off location. The WellCall mobility app was developed to meet this important requirement.

**Fingertip ease**

Once the module is downloaded from the iTunes or Google app store, the authorized user enters his or her secure username and password and taps the login button on the login screen, which brings up the main screen. The user then taps the “contingency plans” link to display all of the available well-control procedure documents, which are provided in a secure PDF format. From there, the user can scroll to the rapid-response guide to find the immediate steps needed and precise instructions on their execution. To ensure security, the app allows access to only the contingency plans tied directly to the specific user identity.

In addition to site-specific well-control documentation, the app provides immediate access to the emergency telephone hotline via a smartphone. By tapping the “emergency” button displayed on all screen pages, followed by the “call” button, the user is instantly and automatically connected to the emergency dispatch, facilitating faster response. For tablet devices the number displayed must be dialed on a phone separately.

The app also allows the user to complete a basic blowout report. These reports include the well name, company name, the name and phone number of the designated onsite contact person, and the physical well location and/or GPS coordinates. The blowout report also may include special instructions regarding the operation being undertaken at the time of a kick, downhole and surface pressure readings, well depth, the type and density of the active fluid, the well type (gas or oil), well-control equipment testing records, proximity to populated areas, and the potential for toxic gas emissions that could endanger people on location or in the area.

The app-based product has been rolled out in the US and Canada, and a modified version for international operations will follow in the second phase of the release. Once fully released, the app will be made available automatically for any operator who has authorized a pre-well blowout contingency plan for its operation.