Betanova 2.0 – iTV interactivity on its way

After an agreement between the RTL Group and public broadcasters ZDF and ARD (both support MHP), the Kirch Group committed itself to the DVB MHP standard. With this commitment BetaResearch, developer for the proprietary middleware betanova and member of the Kirch Group, focus on interactive TV activities, starting the creation of applications using the Java-based middleware, which runs on d-box.

Although the European Parliament has backed away from mandating the Multimedia Home Platform (MHP) standard in future set-top boxes, first iTV applications are already running for PremiereWorld services on d-box.

BetaResearch (Munich, Germany) develops and delivers a modular end-to-end solution packed with features (emailing, banking, gaming, EPG, etc.). The decision to accept and support the Java-based MHP standard means that they are more open to third party developers and independent application suppliers. betanova 2 allows the adoption of existing applications to the d-box. First MHP applications are under development (MHP will be ready in mid 2002). The currently available interactive application - that is downloadable for all PremiereWorld subscribers - with betanova 2.0 software does not support a return channel, although the soft- and hardware does support that feature. Java applets are running and can be implemented at any time onto the MHP platform. A reason for this is that the subscriber management will be enhanced in the near future. As long as the headend technology does work (not all service providers offer it), the d-box user still needs support from the subscriber management to enable interactivity. Viewers still have to call in to decrypt or enable a movie on Pay TV channels. Talks and negotiations with Home Shopping Europe (HSE) to implement an interactive service are almost finished. This service will be on-air late 2002. BetaResearch does not plan to offer any kind of games. This market is held by other vendors. Together with PremiereWorld it is under consideration to implement betting ('Torwette' on Premiere) and other similar interactive betting services. In regard of betting e.g., the situation in Germany is different than in the UK. Lotteries in Germany are a State Monopoly and users are afraid of being cheated by agencies or even security problems between the transmitter and receiver side. For highest ROI all d-box decryption keys are controlled. Viewers who have manipulated their smart card are easily recognised by the customer support centre when calling in for re-activation of their smart card. Although hackers might think that they are smart, the system is smarter and is continuously refined. The BetaChip-Set is licensed and will be delivered – including betanova middleware – to each hardware manufacturer or even service provider. betanova 2.0 runs on different d-boxes such as Nokia, Sagem, etc.

OpenTV, who has been one of the main competitors on the German interactive middleware market, is no longer one as well as Grundig is not. Grundig runs a self-programmed set-top box.

With the new betanova 2.0 software, which is available since October 2001, switching times between free-to-air and PayTV channels decreased to 1.8 s, which makes it more convenient to browse all present channels on the d-box. Also implemented is a protection key for minor viewers. The relevant 'service description table' contains all information for youth protection which comes with the EIT (Event Information Table). A currently performed redevelopment of the code will enhance and optimise Telethek data recalls. The new platform is ready for applications e.g. email, EPG, „Walled Garden" services, etc. When using the EPG, each time the PIN code for protection must be re-entered. This feature gives maximum protection and security for parents. PremiereWorld's EPG can be transmitted together with advertisement, an additional feature enabled by Java. BetaResearch has in mind to make TV program magazines superfluous.

First iTV services from broadcasters are already running. ZDF-Digitext e.g. is on-air after MMS overtook the programming of the application. With iSPORT, the iTV application for PremiereSport shows an update of the scoreboard during ongoing Bundesliga scoccer plays every 15 s. This feature is on-air since November 2001.

iSport offers scoccer results updated every 15 seconds, with statistics, information of players and replay of highlights.

Emailing, which will be introduced by PremiereWorld early this year, is developed by Betaresearch and closely designed to the feel and look of PremiereWorld. But interactivity in general has something to do with the willingness of the viewers to invest in telecommunication infrastructure as well. There has to be a modem, ISDN line or even ADSL connection to enable interactivity between home and back-end. „XDSL might be a competitor to satellite services, and cable modems will be the next step. Our soft- and hardware is ready to allow bi-directional interaction, but until it is widely used, we have to enhance security issues, e.g. for bank account transactions (smart cards with 5-digit-PIN codes together with SSL encryption)", says Dr. Garbers, product management team leader Digital Receivers, BetaResearch. New features include a 'Radio Bouquet Assistant' (independent from TV channels generation of a radio bouquet), the integration of the newly developed Java database (allowing faster and easier channel sorting and allocation), a Home button for faster navigation and TV planer, EPG, Timer, etc.