



**III congreso Pro TDT,
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Flexible DTT models

www.conax.com

Me



- **Geir Bjørndal**
- Sales and Marketing Director, COO, Deputy CEO
- In Conax since 1992

Conax – 2008



- Approximately 150 employees worldwide
- 100 in the Headquarter in Oslo, Norway
- More than 250 customers in over 70 countries
- Security as technology provider and service provider
- Service provider to large operators in Europe and Asia
- Active partner strategy
- Represented by agents and partners worldwide
- 24/7 availability



Support of Horizontal market



- Conax STB model fits Horizontal market models perfectly
- Conax is the only CA vendor who officially has a STB non royalty policy
- Non royalty makes it an easy choice for STB vendors to integrate Conax
- Makes it easy to prepare a platform for Pay-TV before the Pay-TV offering is introduced at platform
- Pay-TV will enter any platform with a substantial customer base.

Conax experience in DTT



- Conax has been involved in DTT activities in the Nordics since 1999
- Conax has contracted approximately 10 national DTT operators in Europe
- Large experience in designing systems for different business models for pay TV in DTT –and other distribution forms. - more than 250 TV operators worldwide use Conax technology to protect their TV signals and business
- Share some experience from 4 DTT operations where there are more than 500.000 cards in the market

Flexible Business models in DTT



- Finland
 - Made a choice of CA platform in 1999
 - Started FTA operation in 2001
 - Open horizontal STB market
 - Started limited Pay-TV offering in 2004 with local content
 - Hokey both as event and as season ticket
 - Infrastructure ready for pay
 - Easy and successful roll out
 - Even with 11 FTA services
 - 2 Pay TV operators in a one card solution
 - Mainly subscriptions
 - Both operators sell product on each other cards
 - 3 – 400 000 Pay subscribers
 - Analogue shut off in 2007
 - To introduce pairing for high value content this year

Flexible Business models in DTT



- Holland
 - Started small in 2003 - 2004
 - All services encrypted from first day
 - Conax chosen as security provider
 - Huge and unexpected success in a country with 99% cable penetration
 - Open but controlled STB marked
 - STBs subsidized and locked to operator for 24 months
 - Not pairing
 - DTT services bundled with KPN broadband offering.
 - In house antennas supported
 - Subscription model
 - More than 500.000 subscribers in the market

Flexible Business models in DTT



- Norway
 - All services but three encrypted
 - Digital roll out area by area
 - Period of both analogue and digital as short as 6 months
 - Started rollout in 2007
 - First areas already shut down
 - Analogue shut down finished in 2009
 - STBs and smart cards provided through retail
 - Pairing and high level of security required
 - Platform operator decides which STBs allowed into market
 - Pay TV operator subsidized STBs
 - Regular subscription services with pay-packages
 - Push VOD project started
 - Hybrid STBs with on demand content over IP already introduced
 - On Demand content model over IP still in pilot
 - 3 – 400 000 subscribers after 8 months

Flexible models for DTT



- Albania
 - Digital DTT operation since 2004
 - STB and smart cards provided by operator
 - All prepaid through voucher sold in "retail"
 - One voucher represents a package
 - Monthly subscription most popular
 - GSM SMS interface for activation
 - Joint DTT and DTH operation
 - DTT card also works for satellite
 - Unexpected high volume for small country