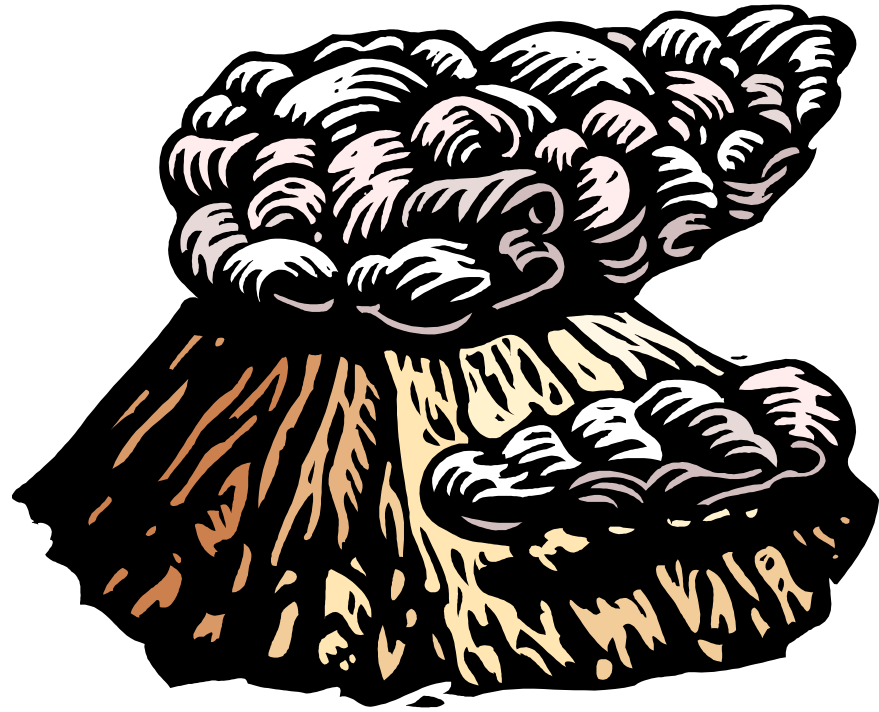


NTRA Annual Conference 2010 Summing up

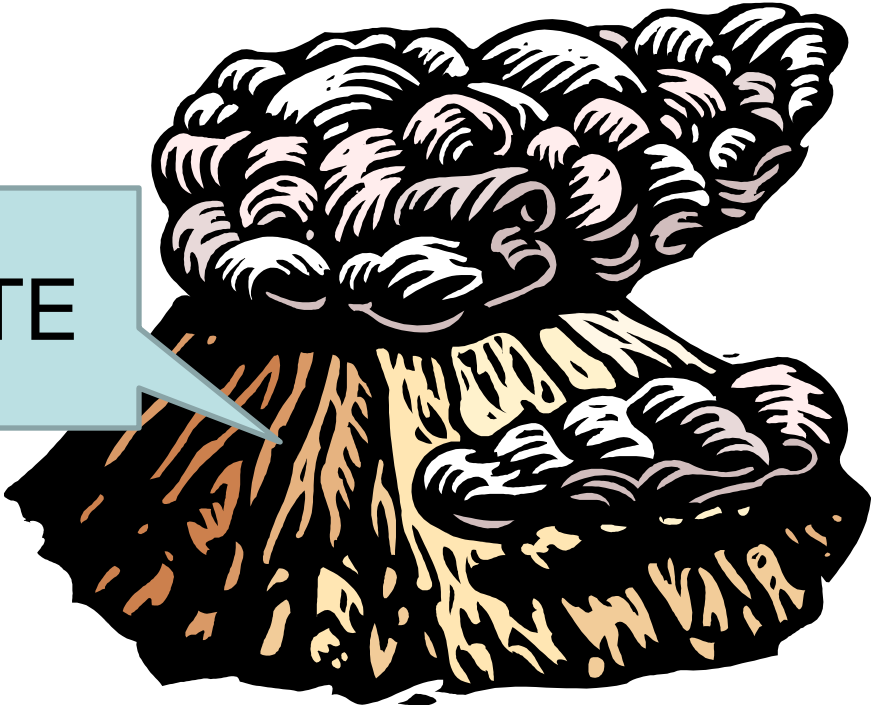


There was one dominant
theme





EXABYTE





ZETABYTE

.



IOTABYTE

Session 1

Regulation and Innovation

Some highlights



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Summing up (1): Innovation

- 90 % of capacity demand comes from video applications
– people communicating with people is the killer application of the internet
- Demand for capacity will keep growing exponentially
- Co-investment across sectors can contribute to reducing the risks
- Inverted U-theory – will too much competition dry up the funding for innovation?



Session 2

Digital Broadcasting

Some highlights



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Summing up (2): Digital broadcasting (a)

- The transition from Analogue to Digital is a necessary pre-condition to get the Digital Dividend in UHF Band, notably in those countries where there is an extensive use of the band for broadcasting
- The efficiency of DTT requires SFN and bilateral cross-border coordination, mainly when different services (e.g TV and Mobile are planned)
- DTT, per se, is offering better quality, HD, datacasting, and increases the number of programs. Thus creating conditions for ensuring pluralism in accessing media



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Summing up (2): Digital broadcasting (b)

- Regulators and industry have to cooperate in order to carefully plan the transition and minimize customers' troubles. Important efforts are needed
- The approach to the transition (with respect to switchover strategy, business model, customer support) could vary according to the market structure of each country (presence of cable, satellite, numbers of broadcasters, etc.)
- To take benefit of the efficiency of DTT up-to-date compression and modulation technology (H.264, MPEG4, DVB-T2, etc) are needed
- A subsidy policy of DSTB facilitates the transition and could be required. Requirements for TV-sets are also helpful



Session 3
Digital Dividend

Some highlights



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Summing up (3): Digital dividend

- The cake has to be cooked before eating it depending on:
 - ASO date, DTT development, neighboring countries, international spectrum harmonization
- The DD which is currently available could be increased. No need of too much band for TV
- A need for a balance between harmonization and flexibility



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Summing up (3): Digital dividend

- Potential uses of DD:
 - Wireless broadband (3G and 4G systems): improved spectral efficiency and lower cost deployment
 - Underserved and rural areas
 - Public safety
 - More multiplexed services with TV programs
 - White spaces: opportunistic access to unutilized TV channels



Session 4

Broadband

Some highlights



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Summing up (4):Broadband

- Does competition kill the goose or is it the 'killer driver' of penetration and growth?
- Drivers for NGN rollout substantially different per country
- BB in Universal Service should be assessed country by country
- Services competition can lead to infrastructure competition – ladder of investment



Session 5

Emerging technologies

Some highlights



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Summing up (5): Emerging technologies

- Evolution of fixed networks towards soft multimedia platforms accessible for 2G, 3G/LTE, Fixed BB, Legacy PSTN
- Bandwidth management necessary for guaranteeing user experience / QoS
- Wireless is in the center of evolution
- 3G is going to increase access speeds dramatically, driven by both manufacturers and operators
- LTE is offering even greater bandwidth, efficiency increases with bandwidth assigned



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Summing up (5): Emerging technologies

- LTE and 3G are complementary
 - LTE more convenient for urban areas
 - 3G for ubiquitous coverage
- Objective should be: no difference in user experience fixed or mobile
- Vicious circle: to increase productivity by BB access, people need to be able to afford it first
- Regulation to resolve QoS / capacity shortage problems



Most repeated message

Regulation for development
is all about
creating investors'
confidence

