

Technical and non-technical aspects of Dutch developments in broadband infrastructure and services

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Outline



- ⊕ Infrastructure-based projects
- ⊕ e-Services
- ⊕ Regulatory developments

Outline



- Infrastructure-based projects
 - casaNet Enschede
 - CityNet Amsterdam
 - Kenniswijk / OnsNet Nuenen
 - Almere Fiber City
 - Wireless Leiden
- ⊕ e-Services
- ⊕ Regulatory developments

Outline



⊕ Infrastructure-based projects

• e-Services

- e-Info
- e-Government
- e-Work
- e-Banking
- e-Entertainment
- e-Learning
- e-Health
- e-Commerce

⊕ Regulatory developments

Outline



- ⊕ Infrastructure-based projects
- ⊕ e-Services
- Regulatory developments
 - Appingedam
 - Lower chamber: Unbundling of cable networks

Infrastructure-based projects



- casaNet is a not-for-profit cooperation between local governments and housing corporations.
- casaNet owns open glass fiber network which is being installed in the whole city of Enschede.
- Any Service Provider can offer its services over the network at the same conditions.
- casaNet connects consumers, institutions and companies.
- Services include triple play (TV channels to be chosen per quarter of a year), radio, health, learning, security, sports, and neighbourhood-dependent services.

casaNet Enschede

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Infrastructure-based projects



- CityNet Amsterdam plans to deploy a FttH infrastructure throughout Amsterdam.
- CityNet ultimately shall connect ~ 420k homes and businesses by 2013 at a cost of 300 M€.
- CityNet first phase currently underway, aiming to connect 40k homes.
- The municipality installs dark fiber over the city.
- Open tender won by Telecom Italia, which invests 50% of the infrastructure costs; Amsterdam secured funding from European Investment Bank for the rest.
- CityNet provides wholesale capacity to SPs.

CityNet Amsterdam

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Infrastructure-based projects



- Kenniswijk's main goals:
 - Create a 'living testbed' of consumers
 - Spawn innovative products and services about computers, (mobile) communication and the Internet
- Project started in October 2000 and lasted until September 2005.
- > 15k FttH (some FttB) network connections and ~ 135 broadband services to consumers and SOHOs
- Public-private cooperation, open market.
- Investments are done by private parties.

Kenniswijk / OnsNet Nuenen

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Infrastructure-based projects



- Subsidy from Dutch government
 - € 45.5 million allocated at the start
 - 2/3 of this money used by the end
- Private financing had to be at least equal to this amount
 - Turned out to be considerably more
- Eindhoven Kenniswijk region: 100,000 inhabitants in 47,500 hh
- More information from the BReATH website: <http://www.ist-breath.net/>

Infrastructure-based projects



- In 2002-2004 in total > € 7 M government funding to 8 Dutch towns incl. Almere to deploy and operate broadband networks and services
 - Almere started 05/2002 with open FttH infra
- Almere Fiber City
 - Build a city-wide fiber network, bundle broadband demand
 - Cooperation of municipality with housing agencies, investing parties and market organizations
 - Phase I: connecting 150 municipal and social organizations, by April 2006
 - Phase II: connecting all company sites in Almere with data rates starting at 100Mbps
- More information on our website.

Almere Fiber City

Infrastructure-based projects



- One of the world's first (2002) and largest independent and completely wireless community networks, started by 3 enthusiastic residents
- Objectives
 - Create cheap and fast open wireless network for Leiden and surrounding area, for internal communication and access to the Internet
 - Stimulation/facilitation of commercial activities such as spin-offs.
- Wireless Leiden is a not-for-profit foundation that owns the wireless network
 - Use as much as possible cheap hardware, open standards, Open Source software and public knowledge
 - Set up a network at very low cost price.
- More information on our website.

Wireless Leiden

e-Services



- VisionAIR
 - FP5 IST project running from 2002-2005
- Aimed at
 - Developing a unified service delivery platform
 - Single CPE, single helpdesk, single bill
 - Municipalities involved in the entire process of implementation, negotiations, service provision
 - Open access for any service provider
- Trials with varying results done in
 - Eindhoven
 - Bremen
 - Bari
 - Athens

VisionAIR

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e-Services



- DigiD
 - 01 January 2005: Launch of the Dutch Digital Identity service DigiD.
 - DigiD provides citizens with a centralised online authentication solution for accessing e-government services, based on user ID and password.
 - To obtain a user ID and a password, citizens need to register with the service online. After completing a form with their personal details (including name, national insurance number, and street address), users receive a user ID and an activation code by postal mail. This code allows them to activate their registration online and to choose a personal password.
 - The move towards a common, cross-government e-authentication system is aimed at boosting the take-up of e-services and thus contributing to the country's goal of e-enabling at least 65% of all central, provincial and local government services by 2007.

e-Services



- Internet voting
 - October 2004: The public water management authorities of two Dutch provinces conduct the world's largest Internet election so far.
 - 2.2 million citizens were called to elect the boards of the public water management authorities by either postal voting or Internet voting and.
 - A total of 403,279 votes were cast, of which 70% were received by postal mail and 30% were cast through the Rijnland Internet Election System (RIES).
 - According to its promoters, use of RIES for other types of elections, including political elections, could be envisaged at reasonable terms. This would however require changes to the Dutch electoral legislation, to which the water management authorities are not submitted and that does not permit distance voting.

e-Services



- Electronic voting
 - Recent troubles with unreliable voting machines, to be replaced by others or by red pencil for the upcoming November 22 parliament elections.
- C2000 digital radio network
 - 14 September 2004: With the launch of the C2000 digital radio network, the Netherlands becomes the first country in the world to have a single encrypted digital radio network connecting all its public order and safety authorities.

e-Services



- Electronic tax declaration
- Electronic crime declaration to police
- Virtual Helmond

e-Government – 4/4

e-Services



- VLAN
- Teleworking
- Remote backup

e-Work

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e-Services



- Internet banking
- SMS alert for account limits

e-Banking

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e-Services



- Online bookstores
- Online music stores
- Online consumer electronics stores
- Online clothes stores
- Online supermarket
- Delivery and pick-up at home
- Marktplaats.nl, bought by eBay

e-Commerce

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e-Services



- Remote surgery
- Baby surveillance in hospital from home
- General Practitioner consults from home
- Patient monitoring from home
- In-home activity monitoring (e.g. elderly people)

e-Health

e-Services



- Videoconference lessons to ill children
- Virtual classrooms for company courses
- Foundation “ICT in school”
- Primary school application Ontdeknet (Discover Net), allowing pupils to learn online from ‘experts’ in society, is now in use at over 100 schools

e-Learning

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e-Services



- Map and route sites
- Google Earth

e-Info

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e-Services



- Live concert broadcasts
- Interactive radio; chat and email channels to presenter/other listeners
- Online gaming
- YouTube, Google Video, also used for advertising products
- Kenniswijk Movie-on-Demand sold as whitelabel to KPN/Planet Internet and Casema who have developed their own video stores with it

e-Entertainment

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Regulatory developments



- Appingedam
 - Municipality of Appingedam intends to partly fund deployment of a glass fiber network in its town.
 - A Dutch cable operator objected in 2004, after which the Dutch government notified the municipality's plans to the EC for approval under EC state aid rules.
 - In October 2005, the EC raises doubts about the compatibility as the public funding might distort competition and negatively impact private bb infrastructure investment which is already present (KPN DSL and cable).
 - EC starts in-depth inquiry.
 - July 2006: EC forbids government support for Appingedam network; it is not needed for filling gaps in the market or for lowering prices.

Appingedam

Regulatory developments



- Lower chamber votes for unbundling the Dutch cable networks to improve competition; Vecai (organization of cable network operators) strongly resists.

Cable unbundling

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-= Thank you for your attention =-

