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Introduction

In December 2000 (TSGS#10(00)0655) and in March 2001 (TSGS#11(01)0154) Nokia has informed 3GPP about the ideas and developments regarding the top level domain for mobile businesses.

Since then there has been further progress within the industry, including for example players' internal analysis projects, bilateral discussions and the UMTS Forum mTLD study.

This contribution reconfirms the importance of the mTLD and presents some refined thinking regarding the role, benefits and implementation of the mobile top level domain.

mTLD is the mobile businesses community initiative

In general the aim is that the mobile businesses as a community would take this initiative in their own hands, keep the name registration business within the industry and enjoy the associated quality and premium. Nokia does not seek direct financial benefit from the creation of mTLD.

All 3GPP members are invited to use the informative material in the attached slide set for further business analysis and in due time join in the initiative. Comments and proposals on possible direct future implications on standardization are welcomed.

Further information

For further information and discussion please contact Kari Lang (kari.j.lang@nokia.com), Ritva Siren (ritva.siren@nokia.com) and Reidar Wasenius (reidar.wasenius@nokia.com).

Top-Level Domain for mobile (mTLD)

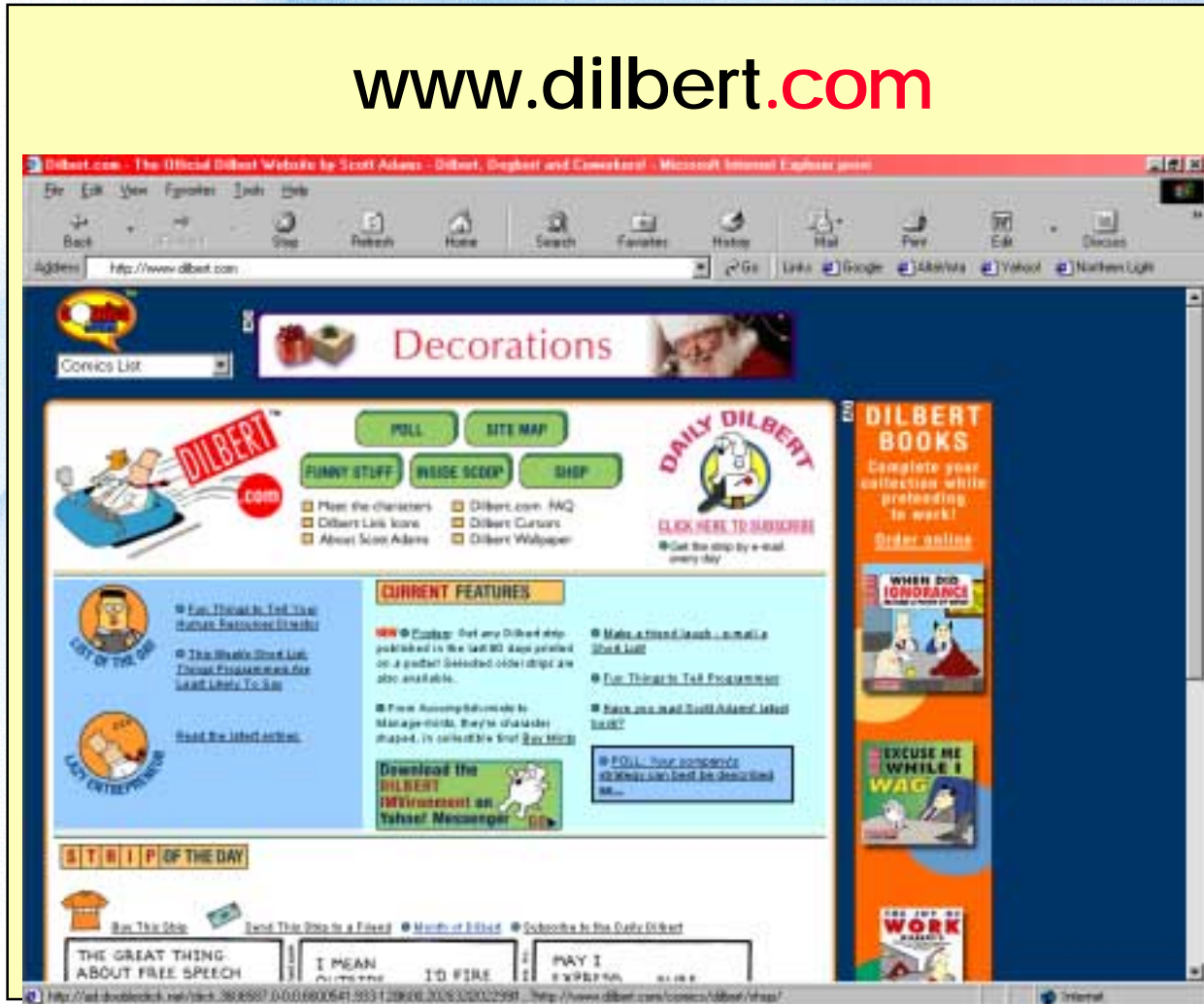
Mar 6th, 2002



mTLD will be the universal identifier for mobile

HYPOTHETICAL EXAMPLE

www.dilbert.com



www.dilbert.mobi



Differentiator needed for cost, convenience and business

Why an mTLD

- Naming is a **core component of all packet based networks** and complements the function of addresses allowing an easy recognition of entities and support for network reorganizations
- In the end, naming of domains, nodes and individuals will be a **multi-billion dollar business** in the IP based mobile
- Mobile industry needs **control of it's own namespace** for business, name space design and technical reasons
- Telecommunications have **common interests** in PSTN-IP interoperability and name structures (compare to E.164)
- **Mobile needs to be differentiated** from wireline telecom and internet due to the need to recognize mobile end users for prize differentiation and mobile services to convey a message of existence of adaptation of content to small devices
- An empty name space is required to have **free hands** in selection of name structures

Benefits from the mTLD

Make access to services and mobile content creation easier for the mobile customer

Improve service quality to facilitate faster take up by mobile customers

Mobile name registration business needs to reside within the industry

Ensure that mobile services can be charged at a premium to fixed services

Increase the acceptance of mobile websites through the mTLD and, therefore, increase the overall market size of Mobile Internet services

- Simple and intuitive naming structure e.g. xxx.mobi
- Identification of mobile content suitable for mobile terminals e.g. small screens
- Visible and easy way to differentiate homepages for mobile device and PC users, i.e. Operator.com/index and Operator.mobi/index
- Operator and industry controlled server locations and naming structures and operating the whole mTLD DNS service gives a possibility to ensure an improved overall service quality through faster and more reliable DNS look up times
- Lack of freedom to define the structure of namespace and pricing will be a business burden for the mobile industry in the long run
- Sub-optimal pricing decisions and registration practices could significantly slow down the mobile services market growth
- By offering a mobile identification through a single common mobile TLD we avoid losing current mobile to fixed differentiation in future IP based networks.
- By enabling higher numbers of smaller mobile content developers an easy access and greater visibility to the mobile world through xxx.mobi identifier
- Application roaming requires a uniform global user interface like the voice calling has today.

mTLD influence chart

Influence area	What	Mode of influence
Name structures for <ul style="list-style-type: none"> • End users • End user devices • Services 	<ul style="list-style-type: none"> • End user need names for multiple purposes • Services need easy to remember names • Professionally design naming structures for humans and M2M 	<ul style="list-style-type: none"> • In .com meaningful names already widely in use • .mobi allows reuse of names for mobile purposes • No need to buy random names from current owners
Financial factors	<ul style="list-style-type: none"> • Mobile ID needed for pricing differentiation for end users and services • Registration of mobile names will be a multi-billion dollar business 	<ul style="list-style-type: none"> • Without a specific mobile ID Europe faces the US mobile pricing problems • .mobi registrations remain within the mobile industry allowing appropriate name structure and pricing design
Technology aspects	<ul style="list-style-type: none"> • DNS server placement and performance • DNS parameters • Potential DNS modifications 	<ul style="list-style-type: none"> • Impact to response times • Impact to flexibility to reconfigurations • Impact to overall functionality especially for application roaming

Hypothetical mTLD **end user** naming examples

Note: all below is just an example of possibilities

Individual

Key ingredient - personal ID component:

John.IDext.Smith



Operator

Can be used in actual application names:

John.IDext.Smith@operator.mobi

-eMail, VoIP

www.name.operator.mobi/John_IDext_Smith

-mobile homepage

John.IDext.smith.operator.mobi

-mobile device name



Potential regulatory requirement

May also be used as an alias to fulfill portability requirements or other interests:

John.IDext.Smith@name.mobi

-eMail, VoIP

www.name.mobi/John_IDext_Smith

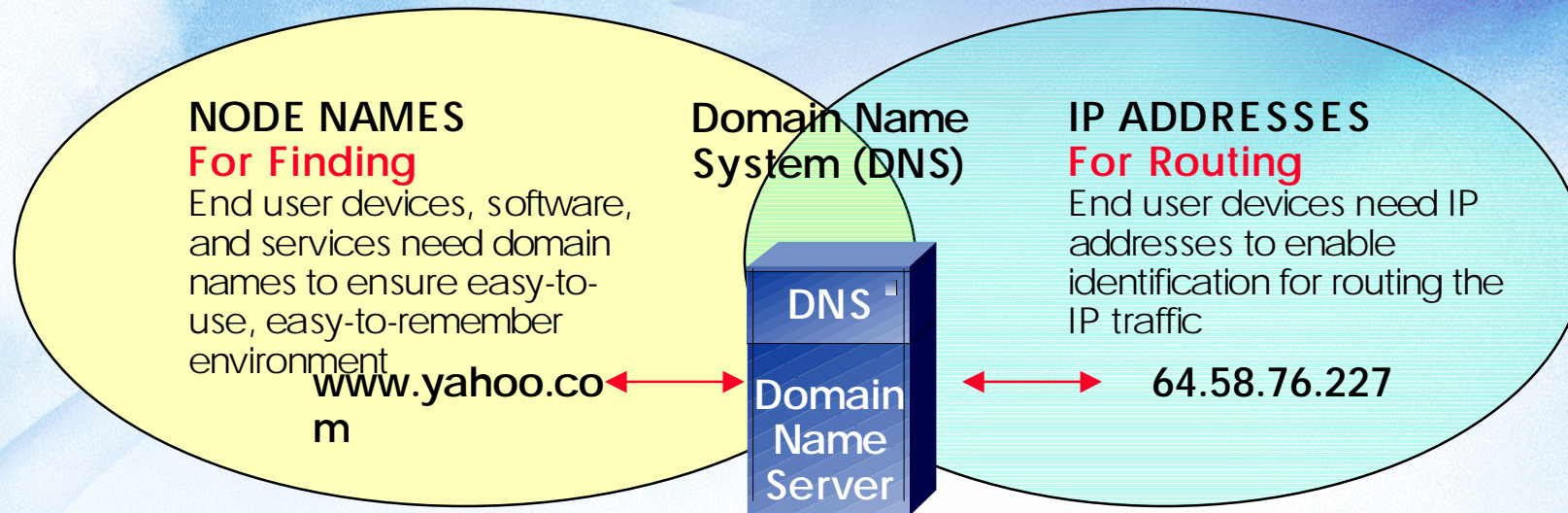
-mobile homepage

John.IDext.Smith.name.mobi

-mobile device name

Name structures are now planned for the next decades

Technical rationale behind mTLD



Names are a key and mandatory ingredient in the Internet

- Owner of a Top Level Domain (.com, .net, .fi) can determine **naming structures** and name registration **pricing**
- Ultimate **administrative control** is in ICANN*
- **Regular names** are already reserved in current Top Level Domains

Perceived quality of the service

- Typical Internet transactions have multiple DNS lookups, therefore DNS service is a key **quality** factor for end users

Mobile industry needs its own TLD to operationally manage this key future business factor

* The Internet Corporation for Assigned Names and Numbers

Industry co-operation needed to guarantee the success of the mobile naming

Guiding principles for the cross-industry coalition

- The mTLD will be promoted as a universal, global domain for naming end user devices and services in the mobile Internet
- Wide representation required
 - Mobile industry (operators, terminal and network vendors, service providers)
 - IT/datacom industry
 - Content/media industry
 - Internet community
 - Key interest groups
- Coalition roles
 - Standardization
 - Policies
 - Services: domain administration, registry service, DNS root service, potential umbrella services

Target organization

Open industry coalition and operative organization for mobile business players

