STATUS OF WAP

Wireless Application Protocol Forum Ltd.

WAP Australia Sydney
May 15, 2001

Presented By

Scott Goldman
CEO, WAP Forum

sgoldman@wapforum.org

WAP Forum Info

- 600+ member companies worldwide

- Manufacturers **of 99% of the world's handsets**

- Carriers **with 300+ million subscribers**

- **Internet and wireless** infrastructure makers

- Software **- billing, customer care, call management**

- Developers **- content, applications, portals**

Current Successes

- Over 18 million **WAP users** (Cahners-In-Stat / Gartner Dataquest / Strategis, eTforecasts)

- Close to 200 carriers **deployed or in final testing** (Mobile Lifestreams)

- 50 million **WAP-enabled handsets shipped worldwide** *(International Data Corp.)*

- Tens of thousands of **developers creating apps and content** *(WAP Forum)*

- 12,000 **WAP sites** from 100+ countries (Cellmania.com)

- 7.8 million **WAP-readable pages** (Pinpoint Networks)

- **DHL Worldwide Express**
  - Web: 36,000 web hits in first year
  - WAP: 250,000 hits in first year
  - Web: 9 months to deploy
  - WAP: 6 DAYS to deploy
  - Web: $350,000 in 1995
  - WAP: $18,000 in 1999
- **Genie - UK Portal**
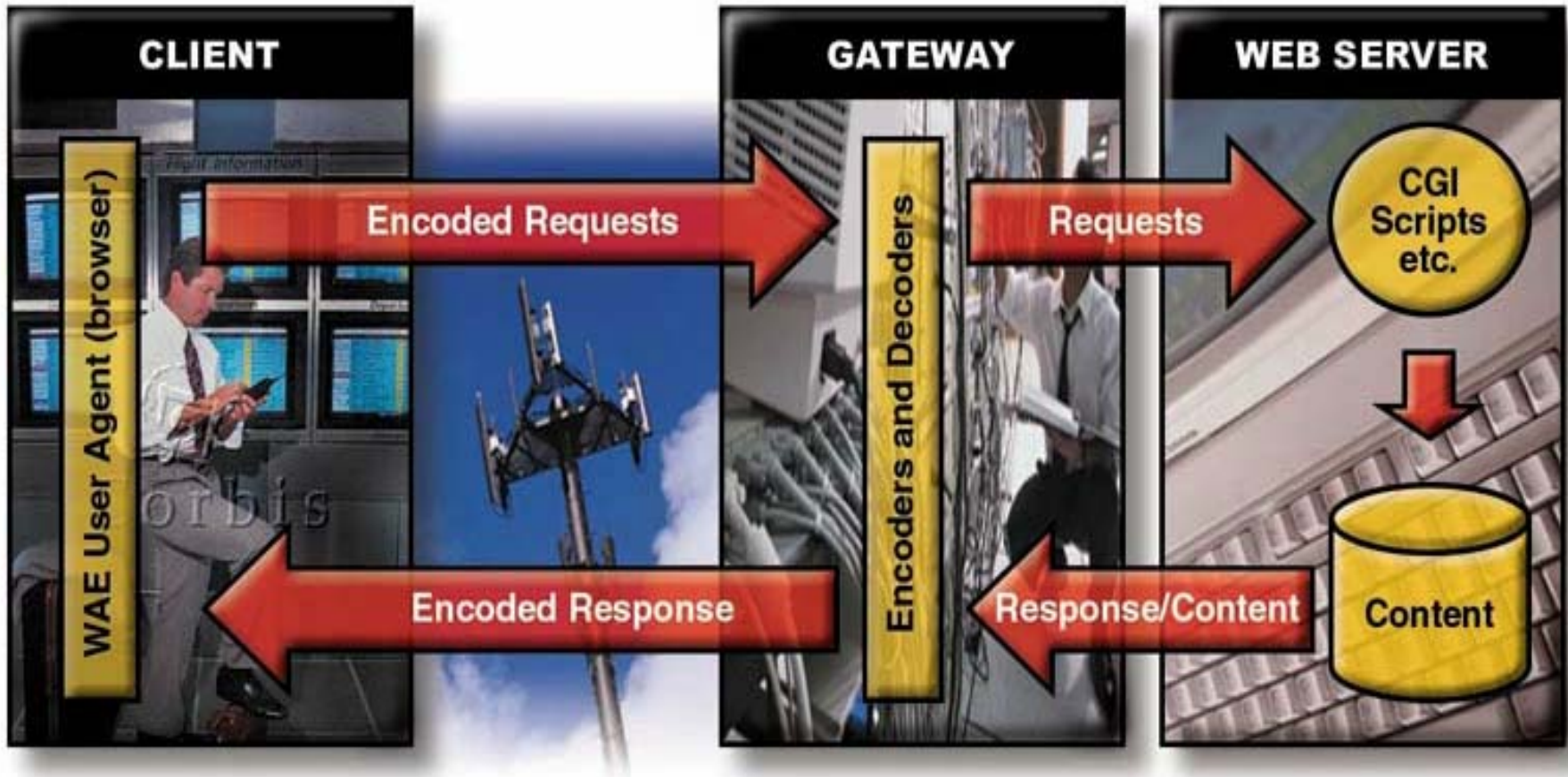 - September 2000: 10 million hits
  - January 2001: 88 million hits

Consumer Successes

- **Sprint** "wireless Web" users reached 1.3 M in 1Q01

- **Telesp Celular:** 323,000 out of 623,000 subscribers with WAP-enabled phone accessed WAP services (EYO2000)

- **Digital Bridges - 30 MILLION hits on** WAP game site from 1 Million games played in a six month period

The Survey FACTS

- **Survey of 500+ users in Scandinavia:**
  - **61% of WAP users: satisfied** with their WAP experience *(Strand Consult)*
- **Survey of 250 users in UK** (on all networks)
  - **71% of WAP users: WAP is meeting or exceeding expectations** (Teleconomy)

WAP Roadmap 1999-2001

1999 — **2000** — **2001**

Network

2G Networks | 2.5G Networks | 3G Launches Start

Device

Small sc____ited CPU, simple UI | Smart phones start to emerge, images, better UI | Media phones emerge

WAP

Security Enhancements:
•WIM
•Public Key infrastructure
•End-to-end Security

Micro-browser:
•WML, WMLScript, ...
•Narrowband Protocols

Multimedia Enablement:
•Aud__, video, graphics presentation formats
•Streaming protocols
•Syn____nization framework

Mobility Services:
•Messaging
•Location

Enhanced Mobility Features:
•Push
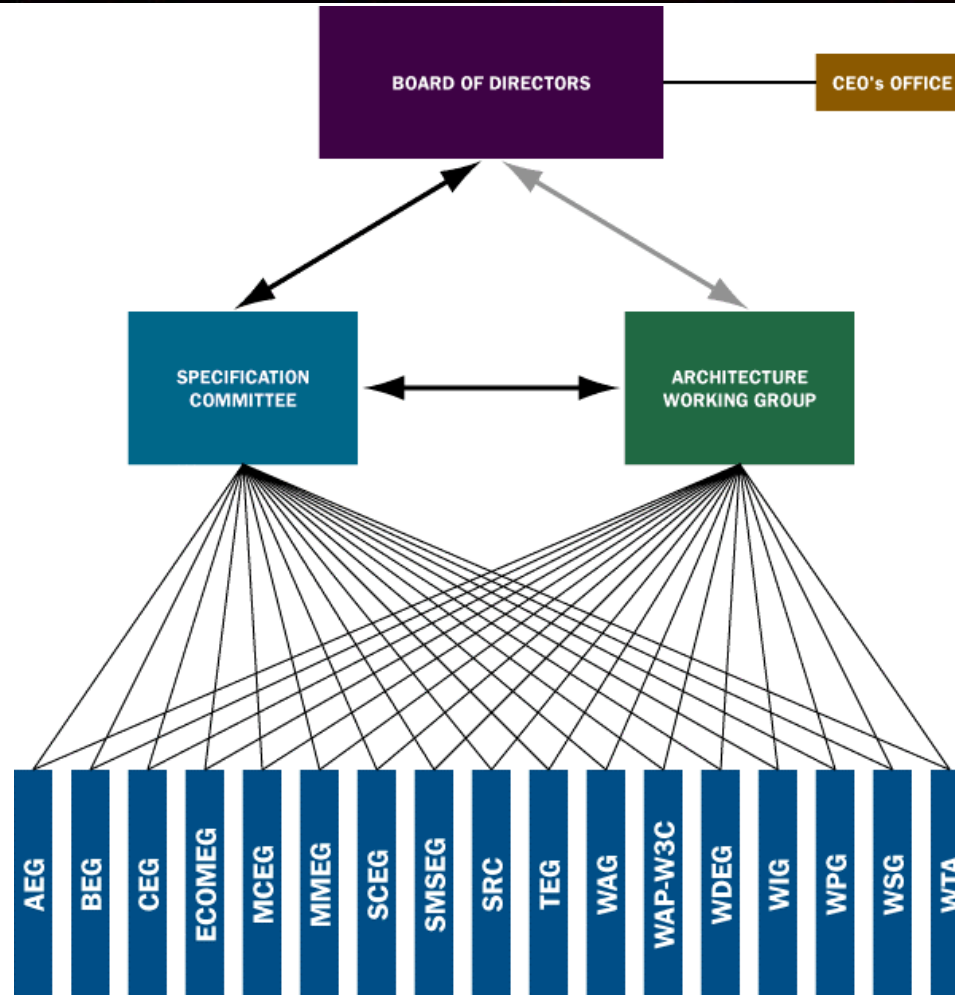•Protocol enhancements
•Markup enhancements

Convergence w/ W3C, IETF
•Architecture
•Protocols and Security (TLS, HTTP, TCP)
•Base app infra (XHTML, ECMAscript, …)

Advanced App Interfaces
•Voice Browsing
•Multi-modal dialog models
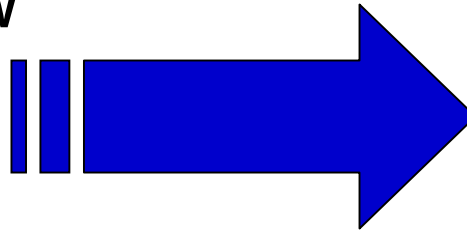•Styles and presentation enhancements

Interoperability

Where WAP is Going...

<u>Driving</u>

- **Market Demand**
- **Interoperability**
- **Internet / WWW Evolution**

<u>Enabling</u>

- Handset evolution
- Standardization
- Wireless net evolution

<u>Doing</u>

- Convergence
- Feature Innovation
- Conformance

- **What the Developers See:**
  - **XHTML (fully backwards compatible)**
  - **TCP**

- **Supported User Features:**
  - **Color Graphics**
  - **Animation**
  - **Large File Downloading**
  - **Location-Smart Services**
  - **Pop-up/Context Sensitive Menus**
  - **Data Synchronization with Desktop PIM**

- **WAP browsers are prerequisite, and optimized, for wireless':**
  - **Unique ergonomics** — One finger navigation
  - **Small screens** — Any content must always be reformatted
  - **Location information** — HTML not designed to handle this
  - **Telephony integration** — Call a number that appears on-screen
  - **Transactions, not browsing** — It's not a buffet, it's room service
  - **Pushed info** — Create a profile and let WAP do the work

Standards and platforms will always be needed to deliver the CONTENT

- **Security meets most extreme demands**
  - **End-to-end encryption**
  - **Supports PKI (new in 2.0)**
  - **Secure proxies in handset AND gateway**
  - **Transactions are as secure as PC sites**

- **Transactions demanding security already happening over WAP**
    - **Banking** (Citicorp, Deutsche, Allied Irish Bank, Schwab)
    - **Finance** (Abbey National and Halifax Bank mortgages online)
    - **M-Commerce** (Amazon.com, MySimon)

- **Basing their future mobile commerce plans on WAP:**

Certification Process Insures Interoperability

- **Interoperability starts with:**
    - **Clear specifications**
    - **Developer guidance and education**
    - **A reference pool of products**

- **Covers all components (compliance and interoperability)**

- **Objective and confidential certification launched in April 2000**

- **Logo use reflects certification**

WAP Certified Products

- **30 Certified Devices**:
  - **Alcatel One Touch 501 / 301**
  - **Ericsson R380 / R320**
  - **Motorola Timeport P7389**
  - **Nokia 7190 / 7110 / 6250 / 6210**
  - **Panasonic GD93**
  - **Philips Xenium 9@9 / Ozeo 8@8**
  - **Samsung SGH-N100/101**
  - **Siemens SL45**

- **6 Certified Gateways**:
  - **From CMG, Ericsson, Nokia, Openwave, WAPIT**

Thousands of sites categorized, indexed and viewable through emulators

- **<u>M-commerce</u> - shopping, ticket purchases, reservations, comparison shopping**

- **<u>Finance</u> - statements, funds transfer, shares trading**

- **<u>M-billing</u> - notification, presentation and payment of bills**

- **<u>Enterprise access</u> - inventory, shipment/sales updates, email access**

- **<u>M-care</u> - customer service, payment status, other backroom operations**

- **<u>Entertainment</u> - games, gambling, interactive multi-player events**

- **<u>Messaging</u> - communication and collaboration**

- **<u>Travel</u> - scheduling, advisories, reservations**

- **<u>Location-smart services -</u> traffic reports, parking information, store discounts, event recommendations**

- **Is already successful today, built for tomorrow**

- **Has a huge, growing base of developers, content, phones and carriers**

- **Helps carriers optimize bandwidth**

- **Is highly secure**

- **Is based on Internet standards**

- **Rapidly developing advanced features**

Thank you!