



Communication alternatives

**Peter Nilsson**  
PipeChain Sverige AB

Why new communication alternatives?

Requirements

How to ..

Shorten leadtime



Increased bandwidth

Lower cost



Reduce network service costs

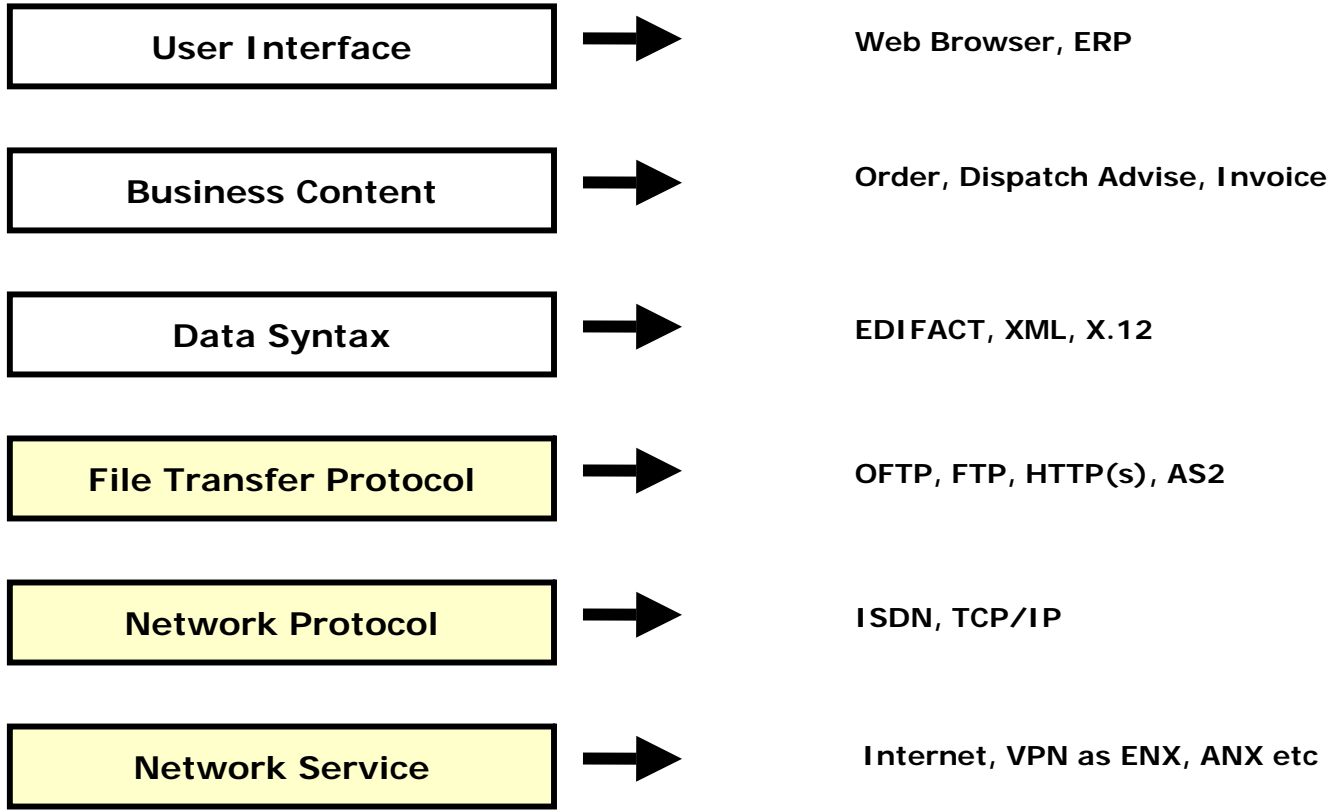
Higher security



Enable encryption



**Different layers. Our Focus**





## Network Protocol

### ISDN

- Used in production with OFTP
- Point To Point
- Often only used for EDI transmissions
- Maximum 64 kbit/sec

### TCP/IP

- Internet can be used
- Should be used with encryption (SSL, VPN)
- No limit on bandwidth
- Use existing Internet line (Email, www)



## File Transfer Protocol

OFTP

- Highly implemented in Europe
- Lack of security (SSL)

FTP

- Many different dialects (80)
- No transparency check and resend

HTTP

- Support security (SSL)
- Needs enveloping e.g.. SOAP to emulate UNB

AS2

- Support security (SSL) and delivery receipts
- Not so well known and implemented
- Needs certification