

Telenor at a glance

Among the largest mobile operators in the world

Telenor global

- Mobile operations in 11 markets across the Nordic region, Central and Eastern Europe and Asia
- A stake of close to 40% in VimpelCom Ltd, operating in 10 markets
- Headquartered in Norway
- Approximately 31 000 employees
- Among the top performers on Dow Jones Sustainability Indexes



195 million mobile subscribers*

Present in markets with 2 billion people

Telenor Norway

- 4 400 employees in more than 30 locations across Norway – incl. Spitzbergen
- Offers fixed line and mobile telephony, broadband, cable TV, Internet services, and coastal radio service
- 0,9 M fixed line subscriptions
- 0,8 M broadband subscriptions
- 3.1 M mobile subscriptions
- 0.5 M cable TV subscriptions

Telenor Group is an international provider of tele, data and media communication services



Source: Telenor

Large-scale and complex IT operation

Telenor Norway IT volumes



Project deliveries per quarter

- •55 projects, 500 systems
- •500 persons from IT
- •100 000 hours



Smaller changes

- •4500 service and change requests per year
- •150-520 per month



Test

- •1000 test case per project
- More than 98% test-efficiency
- •Discover 3 times more in SI/ A test than the vendor



Release

•1300 releases last year

Per release:

- 2-3 large projects
- 2-3 medium projects
- •20-40 systems



Invoice

- •>15 millions per year
- >1,5 million per month
- •>30% electronic



Mobile billing

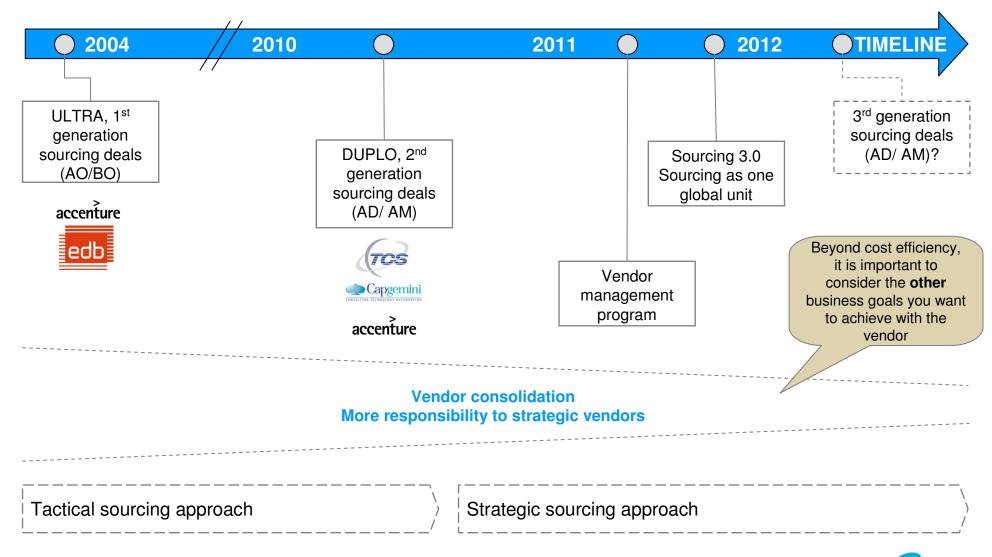
- •10% increase data volume per month
- •107% increase since last year
- 4,2 million subscriptions



Source: Telenor/Tiara

Telenor Norway IT sourcing journey

From diversified complex IT infrastructure towards simplification and consolidation



telenor

Source: Telenor

Business and IT challenges accelerated need for change

Overall link between business challenges and IT

Driver	Telenor business challenge		IT challenge	
Cash flow priorities	Telenor seeks to reduce costs in order to support the cash flow targets		 Fragmented application landscape leading to high volume of AM and system integration Lack of competition and limited off-shoring leading to uncompetitive price levels Large vendor portfolio leading to high overhead costs 	
Time-to- market	Continuously increasing competition, Telenor needs to quickly respond to market needs		 Limited capacity of legacy competencies leading to project delays at peak periods Fragmented vendor set-up leading to long project mobilization Fragmented application landscape leading to long project realization and testing periods 	
End user quality	Telenor needs to serve the market with high quality in customer service and products		 Fragmented application landscape and complex projects with short time of delivery may result in compromise of quality Large vendor portfolio and many parties involved leading to many possible sources of error 	
Business flexibility	Telenor needs strategic and operational freedom to cope with future structural changes		 CAPEX restriction and urgent business projects leading to limited funds available for up-front investment in modernization Governance and vendor interface challenges leading to limited momentum to drive change 	

Dependency on competencies at small providers and

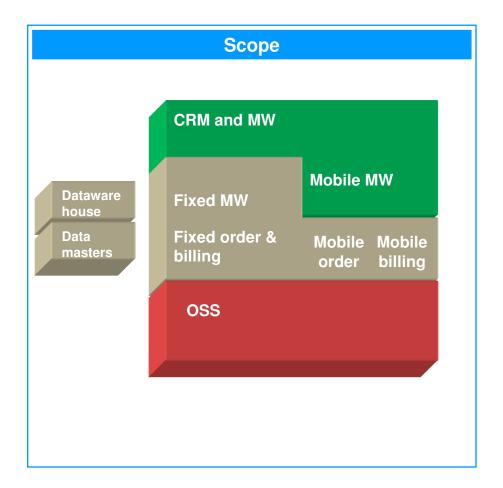
individuals leading to increasing operational risk

The Duplo program

2nd generation sourcing deals

Content

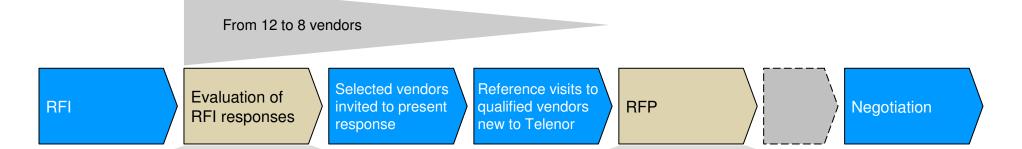
- Application Maintenance (AM) and Application Development (AD)
- Second generation souring program
- Out-sourcing and re-sourcing of 170 applications
- Vendor consolidation, increasing volumes per vendor
- Multi-vendor model with defined cooperation mechanisms
- Competition regime for new AD projects
- Well defined governance regime
- International best practice contract
- Reduce costs and cash spending within IT
- Financing modernization of the systems portfolio
- Keep the high levels of service quality and project deliveries





RFI to negotiation

Learning process with valuable input to optimize final solution



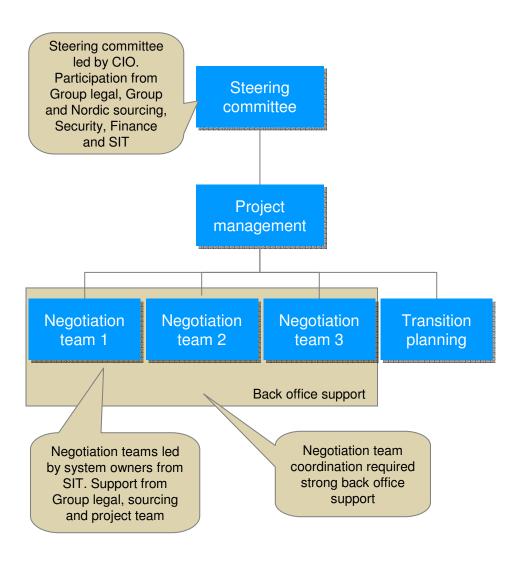
- In general very good responses
- All of the 12 stayed with the process
- The vendors that failed the cut:
 - Lack of Telecom system domain competence
 - Lack of service delivery models and off-shore capabilities
 - More focus of transformation than service delivery – sell in new software products
 - Too narrow to fill the Prime AM role in the Telenor model

- The RFI impacted the RFP
 - The scope was reduced from 5 to 3 packages
 - Optimising volumes and still keeping high level of competition
 - The cooperation model was finally closed where there had been options in the RFI
 - Confirmed and improved SLA and KPI regime



Structured and thorough negotiation process

Negotiation with 4 vendors for 3 packages required intensive planning and coordination



Key takeaways from the negotiation

- 1 Parallel negotiations with all vendors
- Addressed the same topics with all vendors simultaneously
- Each topic was "closed" and agreed upon before moving to the next
- Loyal to the contract lay-out, ensuring identical contracts for all participants and not accepting individual adjustments
- 5 No price discussion before last step of negotiation

Revised IS Sourcing strategy

Duplo addresses both business and IT challenges

- Cash spend reductions for operation (AO/BO), application management (AM) and rates for application development (AD) services.
- Renegotiation of AO/BO services contract including transformation program for virtualization, network clean-up and off-shoring
- Consolidation from many different AM vendors to a few selected Prime AM Vendors into a domain based multi-sourcing regime, demanding a high percentage of offshoring.
- New co-operation model, requiring co-location of AO/BO and Prime AM vendors together with Telenor 1st line Service Desk at Fornebu.
- Increased responsibility for modernisation projects (AD) for selected Prime AM Vendors.
- 6 Competition for AD projects through RFx-processes with selected vendors.
- 7 In-source strategic domains



Results and lessons learned from Duplo

With the Duplo program Telenor has achieved:

Results form Duplo

- Average price reduction for IT Application Maintenance of 50% with improved SLA's
- Substantial reduction in hourly rates for Application Development. Average hourly rate reduced with 40% from January 2011 to June 2012
- Reduced internal IT organization
- Consolidation from more than 100 AM/AD vendors to three: Capgemini, TCS and Accenture
- Competence shift in IT from performing operational tasks to professional vendor management and follow-up
- Established engagement model with vendors that provides for further off-shoring as Telenor organization matures and vendor competence grows

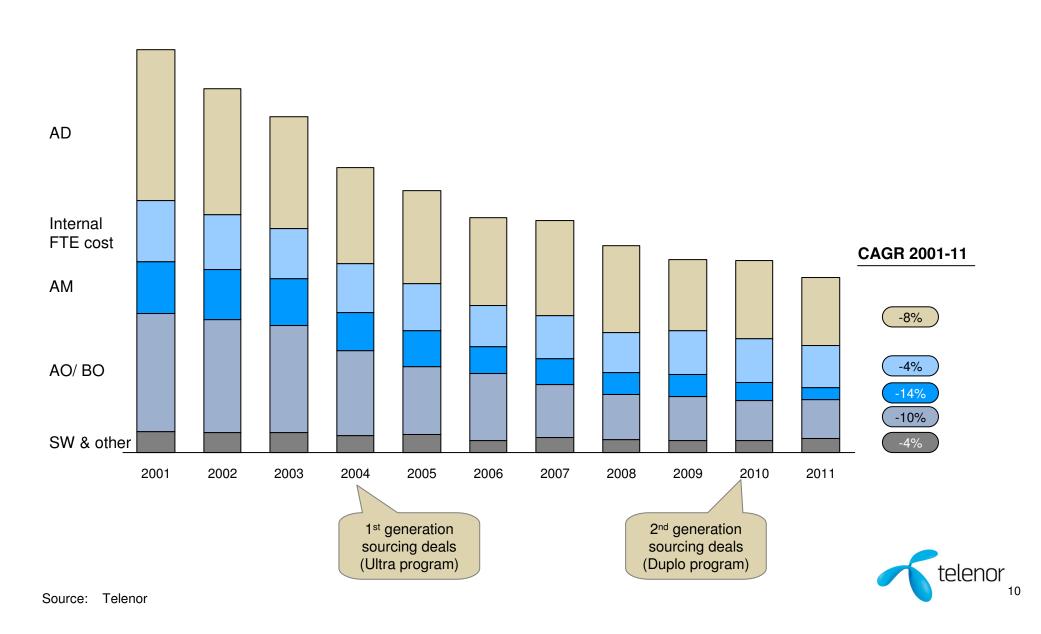
Lessons learned

- Vendors have sufficient competence and capabilities to support the strategy
- Offshore delivery capabilities have matured
- Cost benefits are substantial
- Develop and follow your own sourcing strategy and time schedule - not the vendors'
- Operational risks and security issues, including data security, have to be managed



Telenor has radically reduced IT cost since 2001

Active use of sourcing and vendors has reduced overall cost levels



But there are still areas of improvement:



Benefit of clustering and strategic vendors is not fully realized

- Telenor still acts as separate units toward vendors, following up on a system per system level
- · Vendors do not take full integration responsibility within their cluster and across clusters



Vendor competence is insufficient for complex AD and system integration

- Insufficient value chain and architect competence
- AD volumes are too low to build and maintain sufficient competence



Cooperation between AD/ AM and AO/ BO vendors is not optimal

Handover and coordination of vendors requires too much resources



Modernization of the IT portfolio is still lagging

Modernization plan is not followed. This impacts modernization and simplification of the IT value chains necessary for system "outsourcability"



When considering possible engagement models

No out-of-the-box solutions, will depend on business objectives in scope

Model considerations/ goals

- The engagement model should give substantial and sustainable IT-cost reduction in a TCO perspective
- The model should enable vendor(s) to take an increased end-to-end responsibility and to optimize interfaces
- Vendors should take an active responsibility for simplification and modernization
- The new model should enable customers to hold D vendor(s) accountable for achievement of agreed business objectives (output oriented/ black box)
- The model must address Pain Points/ challenges that the customers are currently facing

Telenor observations

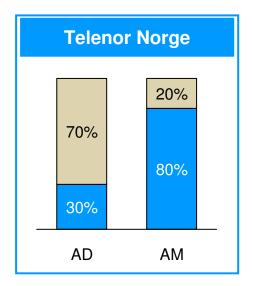
- Vendor market immature/ little innovative when it comes to suggesting engagement models
- Shift in engagement model may require fundamental internal changes in way of work
- 3 No out of the box models that solves all challenges
- The vendor market "promises" substantial IT cost reductions when utilizing higher offshore ratios
- High willingness to of end-to-end responsibility for 5 AM services and AD projects
- Demand management critical success factor
- The optimal engagement model will be based on the risk acceptable, how much of own organization you are willing to change, and the objectives that you want to achieve

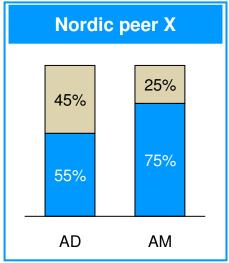


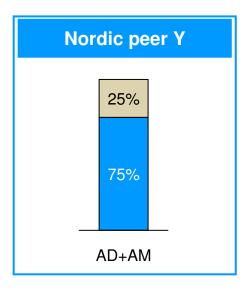
Offshore ratios for other telecom operators

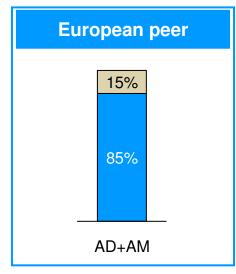
Onshore Offshore

Given the cost pressure in telecom, operators move towards full exploration of offshoring









Forrester industry generic offshore ratios						
Service	Bystanders	Experimenters	Committeds	Full Exploiters		
AD	100%	60%	50%	30%		
	0%	40%	50%	70%		
A.1.5	100%	100%	30%	10%		
AM	0%	0%	70%	90%		



Sourcing 3.0 – Global sourcing power

Leveraging group scale across BU's to maximize sourcing effects

- Discounts by coping all group volume
- Standardization
- Similar equipment/ systems across the group
- Competition essential

- Move towards more alobal standardization and more unified operation
- Enabling more efficient organization
- Standardization of agreements across BU's

Leverage group scale/ volume for best market rates



Global consolidation of vendors to build Telenor competence



- Need help from vendors with telecom/ Telenor competence to change
- Transferring more responsibility to vendors
- Use vendors across BU's
- Simplification
- Efficient and strong vendor management

Common sourcing strategies across different BU's



Ensure attractiveness from vendors to value Telenor as a strategic customer



- Secure further price reductions by apposing the market as one
- Long term relationships

Takk for oppmerksomheten! Lars.Vagsdal@telenor.com