



eSafety

Service-Oriented Architectures

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Working Group Meeting

Versailles, September 19th 2007

[Overview

15.00-15.15 Welcome & actual status

15.15-16.00 Analysis task I

- Core services for eSafety
- Building elements of eSafety services

16.00-17.00 Analysis task II

- Break down services to interfaces
- Draft definition as basis for further work

17.00-18.00 Finalisation

- Next steps
- Assignment of work
- AOB



[Agreed principles

- We are not a „technical“ workgroup
- WG is S/W vendor/solution independent
- We focus on
 - „What is relevant from a users perspective“
 - „Content (Scenarios, Processes, Data)“
 - a set of interfaces for eSafety that support the eSafety core applications
- No implementation work
- Analysis and modelling are main work aspects



[E Safety Core elements / services

To identify such elements, different methods may be used:

- Top down:
 - » Start with high level use cases
 - » derive requirements
 - » Define basic services to fulfil these requirements
- Expert knowledge:
 - » Ask experts from eSafety / SOA / Telematics on their
« ranking of mostly used service elements



[Projects as input for UCs

- Derive from previous projects and work groups
- Identify suitable elements and interfaces
- Focus on projects with co-operative / business scenarios
 - » GST
 - » Coopers
 - » 3GT
 - » Prevent
 - » SafeSpot
 - » . . .



[Start by application examples

- Example:
- Tolling platform as enabler for eSafty services
 - » Tracking of goods (dangerous goods / life stock)
 - » eCall
 - » Traffic jam signalling
- What are the basic (or « leaf » services that are required and how are the interfaces ?
- Basic services: Location and Communication provisioning ?



[Formal description

- We shall agree on common format for
 - » Use cases
 - » Services
 - » Interfaces
- To be used for
 - » Our work
 - » Query form towards 3rd parties
 - » Workshops
 - » Deliverable
- **Proposals ??** (BPL based or simply XML or . . ??)



[SOA definition and standards

- The workgroup already defined what exactly is meant by a Service Oriented Architecture
- The OASIS SOA reference model 1.0 is a good guideline to define and express an eSafety Service Oriented Architecture
- From the Use Cases the eSafety SOA workgroup provides definitions for Services and Service contracts (interfaces)
- Group Services into entities



[SOA key concepts

- Typical main components:
 - Producers
 - Consumers
 - Services
 - Contract
 - Repository
- SOA compliency requires at least:
 - Interaction between service providers & consumers
 - Use of service contracts
 - Use of metadata



[Basic Use Cases from GST

- Software Aggregation and provisioning - determines how eSafety related services are delivered to the target hardware
- Service Subscription - determines how services are “ordered”
- Payment and billing - determines how services are billed and payed for
- Security - determines how the communication between entities is secured

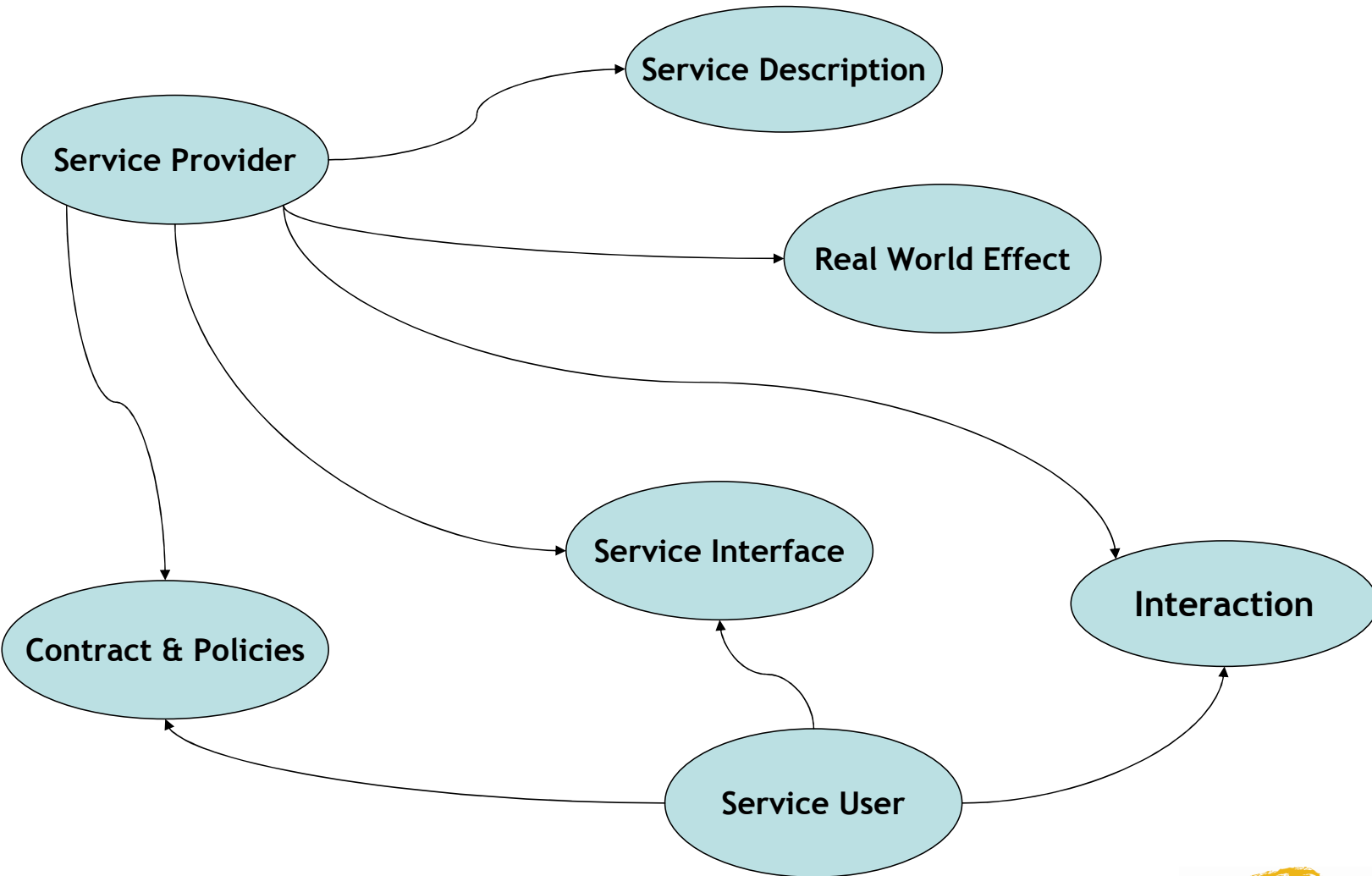


[Service Use Cases from GST

- **High priority messaging channel** - scenarios describing the delivery of high priority (traffic) messages to end-users
- **Content Provisioning** - scenarios describing the delivery of vehicle generated information (floating vehicle data) to an information aggregator
- **Emergency call** - scenarios describing the initiation of an eCall
- **Virtual cone** - scenarios describing the advertisement of accident sites
- **Blue Wave** - scenario describing a emergency vehicle proximity warning



[Basic Architecture notation

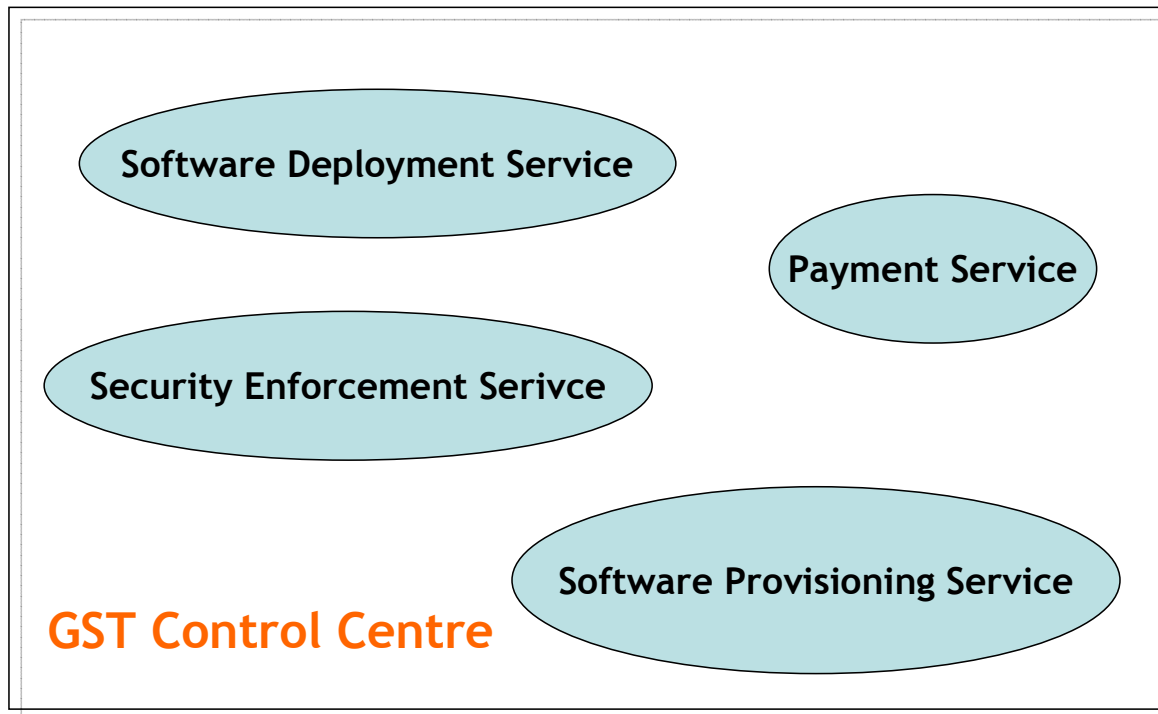


[Notation use

- Compliant to the OASIS reference model = recognition in the SOA world
- Possible model for organizing the deliverable
- Introduces a workflow:
 1. From **use cases** describe services
 2. Describe **interface** (Message formats, Protocols...)
 3. Describe **contracts and policies**
 4. Describe **interaction** with the service
 5. Describe the **real world effect**



[Entities group services



Example



[Possible Supporting Services

- Software Aggregation Service
 - Software Deployment Service
 - Software Provisioning Service
 - Billing and Payment Services
- Nomadic Device Integration
 - Vehicle Gateway Service
 - Nomadic Device interface Service

[Possible Supporting Services 2

- Vehicle to Infrastructure Interaction service
- Vehicle to Vehicle interaction service
- Security Enforcement Service
- Floating Vehicle Data (“tracking”)



[Possible eSafety Services

- eCall
- Diagnostics
- Hotspot warning
- Blue Wave
- Virtual cone
- In-vehicle roadsign signalling
- Speed alert

[Possible eSafety Services 2

- Emergency message channel
 - Broadcast
 - Inter vehicle warning
- Traffic message channel
- Assisted navigation
- Tracking of dangerous goods & live stock

[Partner interest / work assignment

- Did we miss important issues ?
- Volunteers for a theme ?
- Other contributions ?
- We have to keep a good focus and define our field of work !
- Things to discuss . .
- Conclusion . .

[Schedule

The next dates for WG SOA:

November 14 th	Deployment workshop
2/2008	1st public workshop (Forum and breakout sessions)
8/2008	2nd public workshop (Forum and breakout sessions)
10/2008	Final paper ready
	Dissemination activities