



"Sustainable Semantic Interoperability Task Force (SSI-TF)  
 Workshop Summary"  
May 30-31<sup>st</sup>, 2013

Afternoon Session on Day 2, May 31<sup>st</sup>, Jointly Organised With eHealth Innovation

**EU Commission Offices, 25 avenue de Beaulieu, Auderghem (Brussels), Belgium**

Sustainable Semantic Interoperability: Defining the Virtual Organisation

SemanticHealthNet (SHN) is growing a multi stakeholder network of experts and organisations to tackle many different facets of the challenge of achieving the interoperability of health information on a European scale. Given the size and complexity of that challenge, this project will primarily develop methods, inter-organisational processes and governance measures along with some examples of assets that illustrate how semantic interoperability can be achieved.

It is an explicit part of the workplan for SHN to define and help establish a sustainability organisation to take forward the initiatives that we start, maintaining and growing the network and expanding knowledge and practice in the development and adoption of semantic interoperability assets and solutions. In work package 8 this is called a Virtual Organisation (VO), because, at the time of writing the proposal, it was not clear if one or more than one physical organisations would take forward the entire scope.

The SSI-TF May 30-31<sup>st</sup> workshop discussed examples of the activities that might be sustained such as: establishing a permanent collaboration network amongst standards and specification development organisations; developing guidance for, and supporting in concrete terms, communities of clinical practice in order to develop and validate (multi-professional) semantic assets; supporting industry with adoption and benefits realisation from interoperable products; performing or overseeing pan European certification of semantic assets; maintaining a dynamic and innovative multi-level business model that fuels future investments in interoperable capability and adoption of the relevant assets; delivering education and more specific training where needed; advising national eHealth programs and the European Commission on the business benefits and relevant strategic investments needed in this area; growing a funding stream to sponsor future research towards better interoperability approaches and solutions.

The SSI-TF workshop also examined the stakeholders who form part of this multilevel "marketplace", building on a workshop held in June 2012, which was summarised in SHN Deliverable 7.1.

This summary report presents the outcomes of the SSI-TF May 30-31<sup>st</sup> business modelling workshop, and the results of discussions among key stakeholders with regard to the activities mentioned above. A business modeling perspective was adopted to start thinking about the SHN Virtual Organisation (SHN VO) as if it is a single logical entity. This allowed for the identification of stakeholders who contribute to the landscape, whether they are users of semantic assets or enablers of further development or both. The value propositions that will drive their engagement and, for some of those stakeholders, their specific financial and non-financial business models in support of semantic interoperability were also discussed.

The results can now be used to develop a blueprint for the SHN VO, its mandate and governance mechanisms. Once this is achieved, it will be easier to determine whether its tasks can be meaningfully subdivided and mapped to one or more existing organisations.

### SSI-TF Strategic Objectives

- Build awareness & momentum towards designing a sustainable SHN VO business model
- Prioritize SHN VO key stakeholder groups and align relevant value propositions
- Provide strategic input in the design of a sustainable SHN VO business model
- Recommend strategies for optimizing SHN VO business model assets & sustainability
- Align a SSI-TF 2013 plan of action

### SSI-TF Workshop Objectives

- Summarize business modelling best practices
- Categorize SHN VO stakeholder groups by segments and their perceived unmet needs
- Develop SHN VO customized value propositions
- Define the SHN VO business model perspective, framework & sustainability strategies
- Achieve consensus and align next steps (Q2-Q4.2013)

### Multidisciplinary SSI-TF

Perspective	Participants	Confirmed to Attend
<b>Government</b>	Michele Thonnet	<b>YES</b>
<b>Health &amp; Social Care</b>	Jeremy Thorp	<b>YES</b>
<b>Clinicians</b>	Suzanna Hardman	<b>YES</b>
<b>Government</b>	Falk Schubert	<b>YES</b>
<b>Public Health</b>	Anni Buhr	<b>Excused</b>
<b>Policy &amp; Legal</b>	Zoi Kolitsi	<b>YES</b>
<b>Government</b>	Luc Nicolas	<b>YES</b>
<b>Private Payers/Insurers</b>	Jan Van Emelen	<b>YES</b>
<b>Standards Development Organisation</b>	Charles McCay	<b>YES</b>
<b>Standards Development Organisation</b>	Jan Eric Slot	<b>Excused</b>
<b>Industry</b>	Jörg Kraenzlein	<b>Excused</b>
<b>Industry and Standards</b>	Maarten Festen/Annika Sonne Hansen	<b>YES</b>
<b>Business Development</b>	Roger Wallhouse	<b>YES (Day2)</b>
<b>Health Economics</b>	Tom Jones	<b>YES</b>
<b>Legal, Privacy Protection</b>	Petra Wilson	<b>Excused</b>
<b>Academic</b>	Matic Meglic	<b>Excused</b>
<b>Academic</b>	Ian Buchan	<b>Excused</b>
<b>Academic</b>	Dipak Kalra	<b>YES</b>
<b>EC</b>	Benoit Abeloos	<b>YES</b>
<b>eHealth &amp; Business Modelling</b>	Veli Stroetmann	<b>YES</b>
<b>eHealth ICT (epSOS)</b>	Marcello Melgara	<b>YES</b>
<b>eHealth</b>	Jörg Artmann	<b>Excused</b>
<b>eHealth</b>	Jess Vogt	<b>YES</b>
<b>eHealth, Business Modelling</b>	Danielle Dupont	<b>YES</b>
<b>eHealth</b>	Anna Adelöf	<b>YES (Day 1)</b>
<b>eHealth</b>	Lisa Hagberg	<b>YES (Day 1)</b>
<b>eHealth</b>	Mario Romao	<b>YES (Day 2)</b>
<b>eHealth</b>	Geert Thienpont	<b>YES</b>

#### Acronyms used in this document:

B2B	Business2Business
FTE	Full Time Equivalent
EEC	European Economic Community
EVO	European SHN-VO (EVO)
GP	General Practitioner
HC	Healthcare
HPO	Healthcare Provider Organizations
HCP	Healthcare Professionals
SHN	SemanticHealth Net (project)
SI	Semantic Interoperability
SSI	Sustainable Semantic Interoperability
VO	Virtual Organisation

## Breakout Session I: “Defining the SHN VO Stakeholder Segments” (ref. Slides 10-22)

For business modelling purposes, the stakeholders connected to an organization (in our case a virtual organization) are conventionally tiered in terms of their impact on the business, in particular in financial terms. Because healthcare is to some extent a business, but to some extent a societal good and a public service, there is a tension between tiering stakeholders in terms of their true business impact, and ranking their priority in relation to societal value. As an example, patients are absolutely central to the societal value of healthcare, and interoperable health records are clearly first and foremost designed to centre around the delivery of care to individual patients. However, individual patients have almost no influence on the design, purchase or adoption practices of electronic health record systems in general practice or in hospitals. They are almost never involved in the development of standards, or of ICT products for clinicians. They can have a somewhat weak - indirect - influence through proxy stakeholders, such as clinicians and payers, who hopefully will present the patient perspective to some extent alongside their own perspectives.

The focus of this Semantic Interoperability Sustainability Task Force (SSI-TF) is primarily to consider a traditional business ecosystem that could generate revenue to sustain the development and adoption of semantic interoperability assets. In other words, although we wish to ensure best value and maximal benefits to the social good of health care, the SSI-TF had primarily to focus on the economic forces that will generate added value and catalyse richer and more interoperable health records. During the workshop there was some healthy debate about how reasonable it was to rank stakeholders into Tier I, Tier II, Tier III clusters. The meeting agreed to proceed with this clustering, but recognising that this reflected only one of the perspectives on stakeholders and their influence on semantic interoperability. The three tiers and stakeholder clusters used in the rest of this report therefore need to be recognised in terms of their decision making and decision influencing roles in the business of semantic interoperability, as opposed to the benefits and value of semantic interoperability. The societal value dimension is more likely to be invisible through the prioritisation of the development of the semantic interoperability assets, rather than the structuring of the business relationships around the VO.

Objective: Considering the SHN VO market landscape, perceived unmet needs and expected benefits, identify three (3) top tier clusters of stakeholders from the list below, based on their perceived level of influence/impact on the sustainability of the SHN VO business model.

### SHN VO Perceived Stakeholders

#### 1. Patients, Patient Associations

#### 2. Health Professional Associations, Clinical Specialty Associations

#### 3. Healthcare Professionals

- › Clinicians, nurses, pharmacists

#### 4. Healthcare Provider Organisations

- › Hospitals, GP practices, etc.
- › Healthcare managers & administrators

#### 5. National Decision Makers

- › Health ministries
- › Public health bodies
- › National & regional healthcare authorities

#### 6. Payers

- › · Private (insurers, employers, patients)
- › · Public (government, commissioners)

#### 7. Industry

- › EHR System Vendors
- › Medical Device Vendors
- › ICT Infrastructure Vendors
- › Industry Associations
- › Pharma

#### 8. Standards Development Organisations

#### 9. Research

- › Healthcare R&D
- › Health informatics R&D

#### 10. Multi-National Decision Makers

- › WHO
- › EC
- › OECD...

#### 11. Social Care Providers

#### 12. Citizens, Family, Informal Carers

#### 13. eHealth Competence Centres/Competence Authorities

- › gematik, ...

#### 14. Media

## ▶ Tier I

- **Policy Makers (5)**
  - ▶ Policy makers' interest in a SHN VO is driven by the need to ensure sustainable healthcare. While the VO itself cannot deliver improved health outcomes, it can facilitate the development of tools that will eventually improve the way healthcare is delivered leading to better health outcomes, improve trust in shared information, avoid duplication, improve audit assessments and evidence based care, coping with increased demand (achieving more for less). Policy-makers also need a concrete implementation roadmap to build trust and to establish the credibility of the VO.
- **Payers (6)**
  - ▶ Payers are interested in cost-effective solutions and robust value propositions. An SHN VO could provide the quality metrics to assess which health IT solutions are cost-effective.

## ▶ Tier II

- **Industry (7)**
  - ▶ For industry, the SHN VO could provide a repository of standard specifications, QA and certification processes. This would increase the product uptake by customers, leading to better cash flow and more reliable products that will reduce risk. With reference standards available, new products would have lower development costs. The wider adoption of clinical standards leads to better value to customers.
- **Research (9)**
  - ▶ The research community is interested in better quality and lower cost information, as well as more consistent information governance. If provided by an SHN VO, this would lead to better healthcare due to better research (faster trials, better observational data, pharma and devices), more evidence based healthcare (3R goal): Reusable Research Results.
- **Standards Development Organizations (8)**
  - ▶ For SDOs, the SHN VO could be a tool to define a clear focus of development work, as well as being the forum for widespread clinical standards adoption. It would help to define the scope for more investment in relevant standards, better transfer of developed standards to care, and better risk management. SDOs could use the VO to drive adoption and engagement with members.

## ▶ Tier III

- **Health Professional Associations/Clinical Specialty Associations (2)**
  - ▶ For health professional associations, the key value of a VO could be its role in harmonizing inflexible and incompatible information systems through wider adoption of health IT standards. Knowledge embedded in clinical guidelines could then be rolled out faster and enable wide adoption of best practices, at lower implementation costs, leading to better quality of care and better evidence cycle. As a precondition for this work to succeed, existing clinical standards need to be adopted faster.
- **Healthcare Professionals (3)**
  - ▶ Healthcare professionals need better access to data (new patients, transfer of care across all professionals) as an enabler for multi-disciplinary care.
  - ▶ For them, the perceived benefits of a SHN VO are better implementation of clinical rules and guidelines, improved clinical audits, multi-professional care plans, earlier interventions through risk stratification/ monitoring, empowering professional clinical practice, faster adoption of guidelines.

- **Healthcare Provider Organizations (HPOs) (4)**
  - ▶ HPOs are eager to attract patients, improve efficiency of the service delivery process, provide reimbursement and achieve better clinical governance resulting in better outcomes. This can only be achieved through the use of health IT standards which allow for more rapid decisions, faster and more efficient care, and collaborative care models which focus on the patients.
  - ▶ Growth potential from providing high quality care, efficient use of resources and reduced clinical errors.

Breakout Session II: ***“Defining What’s in it for Them: Talk about customized value propositions!”***  
(ref. Slides 23-32)

Objective: Using a value proposition template, develop customized short statements (“elevator pitch”) describing the perceived added value of SHN VO for Tier I, II, III stakeholder segments towards achieving interoperability, and describe the supportive evidence to be generated to substantiate these statements.

Tier I

National Decision Makers/Policy Makers (5)

***Value Statement***

“The SHN VO will enable achieving sustainable and integrated healthcare through intelligent re-engineering of healthcare systems, aiming at improving patient outcomes, population health, life expectancy, and efficiency, by enabling the sharing of health information and knowledge through innovative, sustainable and cost-effective interoperable solutions.”

***Supportive Evidence***

- Exams and wastage avoided
- Improved health outcomes
- Better healthcare audits
- Achieving personalized healthcare delivery to the patient
- Better understanding between GPs/patients and other healthcare providers (eg. survey) and therefore more efficient care provision

Payers (6)

***Value Statement***

“The SHN VO will enable achieving sustainable integrated healthcare, through health data sharing, knowledge transfer, and a smart re-engineering of healthcare systems, for improving population health, patient outcomes, life expectancy, and efficiency, by providing standardized, and cost-effective interoperable solutions.”

***Supportive Evidence***

- Robust cost-benefit analyses
- Improved patient outcomes

## Tier II

## Industry (7)

**Value Statement**

“The SHN VO will enhance the collaboration across health care industries and associations by providing value-added interoperable standardized solutions that will improve efficiency, grow the market, and accelerate the development of safe and effective innovative medicines and health technologies, to address unmet medical needs.”

**Supportive Evidence**

- Profitable use by clients in industry
- Market share growth

## Research (9)

**Value Statement**

“The SHN VO will provide efficient interoperable standardized solutions enabling timely access to and wider sharing of evidence-based health data for research, aiming to improve healthcare and patient outcomes”.

**Supportive Evidence**

- Evidence of adoption of SHN VO solutions
- Reuse of results in research

## Standards Development Organizations (8)

**Value Statement**

“The SHN VO will drive standards development and wider adoption by an engaged community, for the implementation of innovative and standardized interoperable solutions of high quality, enabling market growth”.

**Supportive Evidence**

- Clear roadmap based on commitment to adopt at scale

## Tier III

## Health Professional/Clinical Specialty Associations (2)

**Value Statement**

“The SHN VO will accelerate the adoption of clinical and professional standards, including therapeutic guidelines, by enabling standardized interoperable solutions, contributing to achieving integrated healthcare, to establishing evidence-based clinical development, and to implementing best practices to improve health outcomes”.

**Supportive Evidence**

- Case studies of best practice adoption
- Audits

## Healthcare Professionals/Clinicians (3)

### **Value Statement**

“The SHN VO will provide standardized interoperable solutions that will enable timely access to health data, empowering healthcare professionals working in multidisciplinary teams, and patients, to achieve integrated healthcare, and the adoption of best clinical and disease management practices for improving health outcomes”.

### **Supportive Evidence**

- Established benefits through optimizing access to health data
- Observed implementation of clinical guidelines through clinical audits

## Healthcare Provider Organizations (4)

### **Value Statement**

“The SHN VO will provide standardized interoperable solutions that will enhance healthcare delivery and planning, the continuum of care, clinical governance and decision-making through a harmonized approach that will foster integrated healthcare models, reduce errors, provide timely patient access to health interventions, and ensure optimal resource allocation for improving patient health outcomes.”

### **Supportive Evidence**

1. Case study
2. Improved health outcome results

## Breakout Session III: **“Designing a SH VO sustainable business model framework”** (Slides 35-37)

Objective: To design a SHN VO business model framework for Tier I-III stakeholder segments using a prototype of 9 building blocks.

### Tier I

#### **1) SHN VO Stakeholder Segment**

- National Decision Makers/Payers

#### **2) SHN VO Value Proposition**

- Achieve more with less (value for money) through integrated healthcare solutions connecting people, organizations & data
- Mobilize/unleash unused resources from re-engineering/optimizing HC systems
- Avoid duplication of data entry/tests
- Reduce administrative burden
- Enable optimal use of health data for clinical practice
- Enable resource allocation to optimize clinical, humanistic and economic benefits
- Provide more efficient HC solutions
- Enable patient empowerment for better health outcomes
- Provide certified SH assets

### 3) SHN VO Relationships

- Create SHN VO EU governance (public-private partnership)
- Establish as non-profit organization (e.g. EU reference centre of convergence/reference/excellence in SI towards establishing best practices)
- Develop contractual relationships or strategic alliances with key partners
- Consider potential role of SHN VO as a “broker” or “integrator” between different stakeholder groups (SI service offering/demand)

### 4) SHN VO Channels

- Provide open access to national/regional assets
- Establish a SHN VO portal
- Position SHN VO as a network of networks in SI
- Designate 1 “integrated” contact point at national/regional level
- Use/leverage existing/targeted communication channels to optimize visibility and to reduce costs

### 5) SHN VO Key Activities

- Deliver neutral/open terminologies & interfaces
- Design/assess methodologies
- Provide advisory/consultancy services
- Organize a F2F annual event/conference
- Support workflow systems for functional care
- Establish consensus on standardized protocols
- Ensure maintenance of resources/assets (licensing models)
- Assess semantic assets (certified assets based on pre-established priorities)
- Enable semantic assets & tools
- Conduct SHN VO promotional activities (e.g. SHN VO vision, mission, values, products & services)

### 6) SHN VO Key Resources

- Portal with assets & available resources (methods, tools, datasets)
- Governance & scientific board
- Management staff
- Legal experts
- Marketing/Promotional resources
- Offices to provide space and opportunity for key partners to collaborate

### 7) SHN VO Key Partners

- Health Professional Associations/Clinical Specialty Associations (2)
- Healthcare professionals (3)
- Healthcare Provider Organizations (4)
- SDO (8)
- WHO (10)
- Competence centres (13)
- Media (14)
- Industry (7) (for payers)

### 8) SHN VO Cost Structure (if set up as a new entity)

- Fixed and variable costs related to VO structure & governance model
- Costs related to maintenance of standards, assets, tools
- HR (small multi-skilled team)



## 9) SHN VO Revenue Streams

- Accreditation, certification, quality labelling, audits
- Assessment of industry issues to provide solutions (consultancy)
- Sell specific datasets, linkages between terminologies
- Personalized value-added fee for services for member states, stakeholder groups

## Tier II

### 1) SHN VO Stakeholder Segment

- Industry
  - Standards Development Organizations
  - National organizations
  - EU policy organizations
  - Trade + Healthcare associations
- } Make sure to remain within Tier II Scope !

### 2) SHN VO Value Proposition

- Support key partners in addressing the customers' SI needs
- Promote added value of SI
- Establish/promote good practices
- Educate stakeholders
- Promote/leverage SDO standards/industry solutions
- Establish quality branding
- Gain HC market intelligence
- Grow the business/market size

### 3) SHN VO Relationships

- Establish a promotion-like agency (e.g. touristic promotional agency for a region)
- Not a trade association
- Establish Advisory Board
- Meeting portal for the SI community

### 4) SHN VO Channels

- Educational apps
- Trade associations
- Social media
- Advertising/licensing ramifications

### 5) SHN VO Key Activities

- SI booths
- Conferences/events
- Strategies to increase market uptake of SI solutions
- Semantic "connect-a-thon"
- Develop SI module in university curriculum
- Develop educational apps
- Meet ups (eg. B2B Speed dating)
- Branding (logo/symbol)
- Post epSos roadmap: standardize cross-border health (turn interoperability specifications to normative)
- Certification of Standards/Products

## 6) SHN VO Key Resources

- VO Staff
- Community Managers
- Internet/IT specialized resources
- Legal services
- Accounting
- Marketers & communications (“marcom”)
- Events/conference planners
- SI volunteers (mentorship programs)

## 7) SHN VO Key Partners

- Key stakeholders 2,3,5,6,9 (on education)
  - HC Professional Associations/Clinical Specialty Associations
  - HC Professionals
  - National Decision Makers
  - Payers
  - Research
- In the future, other industries (energy, engineering)
- EEC B2B meeting (organizing committee)

## 8) SHN VO Cost Structure

- Cost related to staffing a VO like this (activities/resources)
- Estimated 2 full time equivalent (FTE)
- Office
- Overheads

## 9) SHN VO Revenue Streams

- Public financing
- Member fee-dependent
- Event registrations
- Sponsorship
- Click fee (e.g. 0.1€ per booking/transaction)

## Tier III

### 1) SHN VO Stakeholder Segment

- HP associations
- Healthcare Professionals
- Healthcare provider organizations
- Patients & citizens

### 2) SHN VO Value Proposition

- Help to improve clinical/health outcomes (benefits to HCPs & patients)
- Help to underpin HC with better quality data (more reliable, complete)
- Provide faster access to health records to support patient care
- Generate better data to support audits/clinical governance, research
- Improve public health knowledge & management (benefits to patients & citizens)
- Achieve better performance and more cost-effective care & services (leading to release of resources = benefits to HPOs)

**3) SHN VO Relationships**

- Enable business relationships across the whole value chain
- Education and dissemination of guidance
- Facilitation/cohesion at the national level (EU dimension? Individual?)

**4) SHN VO Channels**

- Leverage existing channels
- Aim for consistency with other groups

**5) SHN VO Key Activities**

- Support procurement, certification, guidance
- Stimulate demand for SI + supply = market optimization
- Semantic asset development for HCP, patients (maybe act as catalyst, broker or one stop shop)
- Data management
- Collect/share evidence of benefits/failures (one stop shop)

**6) SHN VO Key Resources**

- Research findings
- Cases
- Data management resources
- Change management resources
- SI business case development
- Resources to facilitate cohesion amongst professional bodies to better influence SDOs, industries
- Implementation skills (adoption of guidelines)

**7) SHN VO Key Partners**

- Payers
- Suppliers
- Patient associations

**8) SHN VO Cost Structure**

- Use flexible costs only to allow the VO to grow and change according to demand / requirements (e.g. Outsourcing, not employing staff)

**9) SHN VO Revenue Streams**

- HPOs business case (for eHealth/interoperability) developed first, then the case for skills development would come into play
- Learn from various SDO models (may be able to mirror their approach)
- Assess who might pay for SHN VO services (payers, EC HPOs, industry if better data; exclude MoH)

## Breakout Session IV: “Defining Key Success Factors, Risks & Strategies for Optimizing the Sustainability of the SHN VO Business Model” (ref. Slides 38-45)

**Objective:** Identify 3-5 perceived key success factors, risks and their likelihood (L,M,H) relevant to the SHN VO business model by stakeholder segment, and align strategies towards optimizing the assets and sustainability of the SHN VO business model.

### Tier I: National Decision Makers/Policy Makers & Payers

Stakeholder Segment	Success Factors	Likelihood (L,M,H)	Strategy to Optimize SHN VO Business Model
National Decision Makers/Health Policy Makers /MoH/ Health Authorities (5)  Payers (6)	Convince stakeholders (HC providers involvement)	M	•Establish an Advisory Board, Scientific Board •Identify appropriate incentives for each stakeholder group
	Position as part of the EU governance for eHealth (on the map)	H	•Align with political timelines •Generate convincing evidence and value propositions •Match value proposition to expressed needs
	Establish as part of EU eHN priorities (strategic alliance)	M	•Gain political support •Establish governance with existing strategies at regional/national levels •Identify and dedicate specific resources
	Step by step start + effectiveness + efficiency as 1 <sup>st</sup> service	M	•Win-win demonstration •Agility, timeliness & use of appropriate channels (web portal...)
	Added value in terms of improving efficiency (cost-effective)	H	•Establish partnerships & value chains brokering •Promote SHN VO in the media

Stakeholder Segment	Risks	Likelihood (L,M,H)	Strategy to Mitigate Risks & To Optimize SHN VO Business Model
National Decision Makers/Health Policy Makers /MoH/ Health Authorities (5)  Payers (6)	Respect of PPP contractual agreement vs risk of monopoly	M	•Multidisciplinary governance model/statute to prevent risk •Business model to address different stakeholders incentives
	Risk of establishing big costly structure (monopoly) during economic crisis	H	•Develop lean SHN VO structure & strategic alliances that foster integration into EU/national strategies to avoid duplicating costs •Develop sustainable business model •Establish pricing strategies based on willingness to pay and affordability •Ensure transparency
	Short term gains more valued than long term goal	M/H	•Establish short/mid/long-term objectives & corresponding plans of action •Identify key drivers •Build on quick “wins” to achieve long term mission
	Added value not well understood (compelling value propositions needed)	H	•Develop compelling value propositions by stakeholder groups •Build awareness •Change paradigm: “Investing in health rather than paying for health care” (evidence-based cost-benefit assessments by disease area)
	Sub-optimal communication strategy/marketing	L-M	•Run awareness campaign •Disseminate value propositions in strategic forums and major health care platforms •Publish, publish, publish...

### Priority

Develop the SHN VO strategy and structure

### Key Strategies

1. Create a SHN VO Advisory Board to position SHN VO as part of EU governance for eHealth, to gain political support and to build strategic alignment with relevant national/regional platforms & timelines
2. Establish the value of SHN VO to deliver customized, robust and evidence-based value propositions
3. Develop a sustainable business model to bring meaningful value to SHN VO Tier I-III stakeholders
4. Build strategic alliances, win-win partnerships, and value chain brokering to optimize benefits
5. Promote SHN VO using a targeted approach and a marketing/communication/dissemination plan

## Tier II: Industry, SDOs

Stakeholder Segment	Success Factors	Likelihood (L,M,H)	Strategy to Optimize SHN VO Business Model
Industry (7)	Gaining more customers	M	<ul style="list-style-type: none"> <li>•Targeted marketing</li> <li>•Package products</li> <li>•Reduced customer risks</li> </ul>
	More efficient marketing	H	<ul style="list-style-type: none"> <li>•Effected outreach</li> <li>•Relationship management</li> </ul>
Standards Development Organizations (8)	Increase adoption	H	<ul style="list-style-type: none"> <li>•Clear roadmap</li> <li>•Visibility</li> </ul>
	Increasing the number of members	L/M	<ul style="list-style-type: none"> <li>•Clear roadmap</li> <li>•Visibility</li> </ul>

Stakeholder Segment	Risks	Likelihood (L,M,H)	Strategy to Optimize SHN VO Business Model
Industry (7)	Distorting the market	M	<ul style="list-style-type: none"> <li>•Clear scope</li> <li>•Prove market growth potential, including reduced costs &amp; risks</li> </ul>
	Conflicting with the industry's marketing message	L	<ul style="list-style-type: none"> <li>•Develop promotional/educational tool kit (case studies, communication, marketing strategy)</li> <li>•Clear scope</li> </ul>
Standards Development Organizations (8)	Confusing the market (another "do")	H	<ul style="list-style-type: none"> <li>•Focus on promotion</li> <li>•Relationship management</li> </ul>
	Spread resources too thin	H	<ul style="list-style-type: none"> <li>•Establish quick wins</li> <li>•Focused efforts</li> </ul>
Industry + SDO	Quality of key staff	M	<ul style="list-style-type: none"> <li>•Recruitment supervised by Advisory Board</li> <li>•Clear metrics</li> </ul>

### Key Strategies

1. Develop/communicate clear implementation roadmap based on SHN vision, mission, values
2. Optimize reach through optimal customer/relationship management capabilities to address stakeholders' perceived needs/incentives
3. Establish SHN VO as a platform to expand the market and to grow the industry and SDOs'business
4. Demonstrate the SHN VO value quick wins, including its impact on business growth
5. Develop educational program (eg. Train the Trainer, webinars, business days etc.) and targeted promotional plan & tool kit

Tier III: Health Professional/Clinical Specialty Associations, HC Professionals, HC Provider Organizations and (Patients)

Stakeholder Segment	Success Factor	Likelihood (L,M,H)	Strategy to Optimize SHN VO Business Model
Health Professional/ Clinical Specialty Associations (2)	Aligned statements of requirements (VALUES)		
Healthcare Professionals (3)	Application of skills by stakeholder groups		
Healthcare Provider Organizations (4)	Application Tools		
Patients/Patient associations (1)	Leverage developed assets		
	Bespoke iterative (adaptive + additive)		
Stakeholder Segment	Risks	Likelihood (L,M,H)	
Health Professional/ Clinical Specialty Associations (2)	•Unusable deliverables		Ensure that all stakeholders work together on development
	•Unthinking implementation		
Healthcare Professionals (3)	•Unintended consequences		
Healthcare Provider Organizations (4)	•Unable to sell the concept of European VO		
Patients/Patient associations (1)			

### Key Strategies

1. Establish clear and evidence-based SHN VO value statements tailored to stakeholder groups
2. Promote SHN VO developed assets and applications utilising the specialised skills that different stakeholders provide
3. Deploy a SHN VO step-by-step/iterative implementation strategy leveraging measurable successes to ensure progress is always visible and to maintain momentum
4. Promote SHN VO using a multi-stakeholders patient-centric approach involving HCPs, clinical specialty associations and HPOs
5. Build momentum and synergies to mutually engage Tier III stakeholder groups

## Plenary Session: “eHealth Innovation Reflections”

- Clearly define the SHN VO structure and its role/activities for enabling SI (including its vision, mission & values)
- The SHN VO won't replace national level SDOs. The European SHN-VO (EVO) should instead play the enabler for better adoption. The EVO would offer a kind of round table to SDOs and act as an enabler rather than a competitor.
- For business modelling purposes, consensus was achieved on SHN VO top stakeholder tiers, as above.
- How to use business models for semantic interoperability where the patient is the focus? It is important that the patient is considered as the stakeholder ultimately benefitting from changes.
- Patient-centric approaches should be embedded in the SHN VO mission
- Need to build incentives and to demonstrate value for all stakeholders not just the patient. It is likely that many parties will benefit.
- Define who is the customer (payer) of SHN VO services
- The patient is currently not an influential “decision-maker”, but will become increasingly empowered and thus will want to play a bigger role in the decision making process in the future.
- Does being a customer really need to involve money? Distinction to make between customer (financial transaction involved) and stakeholders (e.g customers are stakeholders but not all stakeholders are customers).
- Cannot the transaction between the VO and the customer take place without involving money? Conceptually interesting but financial aspects are key to ensure “built-in” sustainability.
- Need to establish clear business model focus (for whom are the SHN VO products/services, what is the added value, etc.). This needs to be clear before defining the full scope of the business model. The VO should consider/address all stakeholders into a coherent whole.
- The brokerage role suggested for the VO is a classic business model but this relates best for businesses such as insurance companies etc where the business model is much simpler. Using such a model for the VO, which is a complex entity, might not be feasible.
- How to get to the stage where summaries are available across Europe and understandable: who will make all the elements happen? The value chain amongst key stakeholders is where to focus our efforts to achieve sustainability.
- The set of artefacts (set of specifications / training solutions / legal frameworks etc) which will be produced and held by the VO will need to be sustained for Europe.
- When interoperability will happen, VO will enable optimal working of work flow systems in healthcare.
- Need to be concrete on how to provide patients with better quality of life. The evidence/incentives should not only focus on financial aspects
- Patients are also stakeholders and beneficiaries but it is suggested to postpone their inclusion for now to first focus on SI key decision-makers
- An EU approach might reduce system costs: so what makes the benefits European rather than national: What is the added EU dimension?
- Discussion of a wider framework for the assessment of outcomes/benefits from semantically interoperable EHRs – all the drivers are to save money, but SHN VO needs to deliver high quality services/products, and demonstrate impact on improved quality of life, health outcomes and value.

## Establishing a sustainable SHN VO

It was proposed that a number of sustainability activities could be carried out along the example of the following:

- Establish a collaboration network amongst SDOs
- Provide guidance and support for communities of practice to develop semantic assets
- Support industry with adoption and benefits realisation
- Oversee pan European certification of semantic assets
- Maintain a dynamic multi-level business model for future investments in interoperable capability and adoption
- Deliver/ promote education and more specific training
- Advise decision makers on the business benefits and relevant strategic investments needed
- Grow a funding stream to sponsor future research towards better interoperability

### Plenary Session: “Next Steps & Plan of Action” (ref. Slide 47)

Strategic Imperative	Timing (Q2-Q4)	Who	What/Communication
1. Develop SHN VO strategy to propose VO structure (1 page executive summary)	Target: End of June/Mid July	VS/DK/DMI	•Gather input from SSI-TF •Share at Sept.meeting (Munich) •Standing committee alignment?
2. Produce SSI-TF workshop summary slide deck (flip charts), including short value proposition statements	Target: End of June	DMI & Empirica/DK (review)	•Send email to SHN consortium to inform them of 1 <sup>st</sup> SSI-TF workshop, upcoming workshop report & next steps
3. Produce SSI-TF workshop short report (executive summary format)	Target: Mid-July	DMI & Empirica/DK (review)	•Invite AT Clemens Auer to the next SSI-TF workshop •Expand proposal – PT Enrique to join the SSI-TF
4. Review SSI-TF workshop slide deck /report and provide final comments on value proposition statements	Target: Mid-July to Mid August	SSI-TF members to review & provide final input	•Finalize in time for September 11-12 meeting –eHGI (Sept 11 AM) •Consider informal validation of VP statements within SSI-TF members organizations
5.Consolidate SSI-TF value proposition short statements and align broader communication strategy	Target: Mid-Aug-End August	DMI/Empirica	•Leverage at multi-stakeholder platform (coordinate with Benoit for next meeting – CEN-TF) •Liaise with DG SANCO
6. Start compiling existing supportive evidence of SHN added value (clinical, economic, humanistic, societal) to strengthen value propositions	Target: Q3-Q4 2013	SST-TF members	•Develop framework for classification of evidence •CV use case care pathway •Health economic value of SI •Heart failure CBA example •...

SSI-TF Workshop  
May 30-31, 2013, Brussels

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